AMERICAN Cinematographer

THE MOTION PICTURE CAMERA MAGAZINE

25¢
FOREIGN 35c

LEONARD CLAIRMONT

In This Issue . . . . .
AAF's "THE LAST BOMB"
SENSATIONAL WAR FILM

FEBRUARY
1946

Speed and Fine Grain Negative Stocks by Du Pont

SUPERIOR 1—Ultra-fine grain with normal contrast and wide latitude; noted for excellent rendition of foliage greens. Balanced especially for exterior conditions.

SUPERIOR 2—Fine grain with ample speed for low-key lighting. Wide latitude and excellent rendition of flesh tones characterize this all-purpose stock.

SUPERIOR 3—A negative stock of extreme sensitivity, valued by cinematographers for use with low-level illumination or to achieve great depth of focus with very small apertures.

All three of these negatives are uniform, precision-made products developed by Du Pont research—an added assurance of their faithful performance.

E. I. du Pont de Nemours & Co. (Inc.), Photo Products Department, Wilmington 98, Delaware.

In New York: Empire State Building
In Hollywood: Smith & Aller, Ltd.

DU PONT MOTION PICTURE FILM

DU PONT
REG. U. S. PAT. OFF.

BETTER THINGS FOR BETTER LIVING
. . . *THROUGH CHEMISTRY*

THE 35mm CAMERA

THAT MEETS EVERY INDIVIDUAL NEED

IF there's one kind of American equipment that's known the world around, it's Eyemo —the camera that has "seen everything" in every corner of the world.

Before the war, the Bell & Howell Eyemo was considered official equipment for the world's ace newsreel men. During the war, Eyemo went into combat with every branch of our fighting forces. And today Eyemo continues to be the One World's truthful eye—getting the news wherever it happens, getting it fast, getting it right.

It's precision construction proved and reproved under every possible condition of weather, war, and peace. Eyemo guarantees that *what you see, you get.*

Seven models, with correlated accessories, give you a camera suitable for every field or studio need. Send the coupon today for full details on all models.

Bell & Howell Company, Chicago; New York; Hollywood; Washington, D. C.; London.

BELL & HOWELL COMPANY
7148 McCormick Road, Chicago 45

Please send me information on Bell & Howell Eyemo Cameras and correlated accessories.

Name..

Address..

City.............................. *State*.......... AC 2-46

Opti-onics BELL & HOWELL

OPTI-ONICS—products combining the sciences of OPTIcs electrONics • mechanICS

PRECISION-MADE BY

Bell & Howell

SINCE 1907 THE LARGEST MANUFACTURER OF PROFESSIONAL MOTION PICTURE EQUIPMENT FOR HOLLYWOOD AND THE WORLD

AMERICAN CINEMATOGRAPHER

THE MOTION PICTURE CAMERA MAGAZINE

VOL. 27 FEBRUARY, 1946 NO. 2

CONTENTS

Photographing Army Air Force Training Films.................... 42

Army Air Force's "The Last Bomb" Sensational War Film......... 44

The Subjective Camera........................*By* HERB LIGHTMAN 46

Report of SMPE Committee on Color........................... 48

Through the Editor's Finder..................................... 50

Among the Movie Clubs.. 56

Simplified Movie Processing in Your Own Darkroom...............
....*By* JAMES R. OSWALD 58

Current Assignments of A. S. C. Members......................... 64

ON THE FRONT COVER is a photograph of one of the numerous sweeping locations for the David Selznick production in Technicolor, "Duel In the Sun." King Vidor is director of the $5,000,000 production. Lee Garmes, A. S. C., is director of photography; with Ray Rennehan, A. S. C., as Technicolor associate. Still by Madison Lacy.

OFFICERS AND BOARD OF GOVERNORS
AMERICAN SOCIETY OF CINEMATOGRAPHERS

Leonard Smith, President — Fred Jackman, Exec. V.-Pres. and Treas.
Charles Clarke, First Vice-President — Joseph Walker, Second Vice-President
Arthur Edeson, Third Vice-President — Ray Rennahan, Secretary
George Folsey, Sergeant-at-Arms

John Arnold
John Boyle
Lee Garmes
Byron Haskin
Sol Polito
John Seitz
Leon Shamroy
William Skall

The Staff

EDITOR
Walter R. Greene

TECHNICAL EDITOR
Emery Huse, A.S.C.

ASSOCIATE EDITOR
Edward Pyle, Jr.

MILITARY ADVISOR
Col. Nathan Levinson

STAFF PHOTOGRAPHER
Mel Traxel

ARTIST
Glenn R. Kershner, A.S.C.

CIRCULATION AND ADVERTISING
Marguerite Duerr

ADVISORY EDITORIAL BOARD
Fred W. Jackman, A. S. C.
Victor Milner, A. S. C.
Alvin Wyckoff, A.S.C.
Farciot Edouart, A. S. C.
Fred Gage, A. S. C.
Dr. J. S. Watson, A. S. C.
Dr. L. A. Jones, A. S. C.
Dr. C. E. K. Mees, A. S. C.
Dr. W. B. Rayton, A. S. C.
Dr. V. B. Sease, A. S. C.

AUSTRALIAN REPRESENTATIVE
McGill's, 179 Elizabeth Street, Melbourne,
Australian and New Zealand Agents

●

Published monthly by A. S. C. Agency, Inc.
Editorial and business offices:
1782 North Orange Drive
Hollywood (Los Angeles, 28), California
Telephone: GRanite 2135

●

Established 1920. Advertising rates on application. Subscriptions: United States and Pan-American Union, $2.50 per year; Canada, $2.75 per year; Foreign. $3.50. Single copies, 25c; back numbers, 30c; foreign, single copies 35c, back numbers 40c.

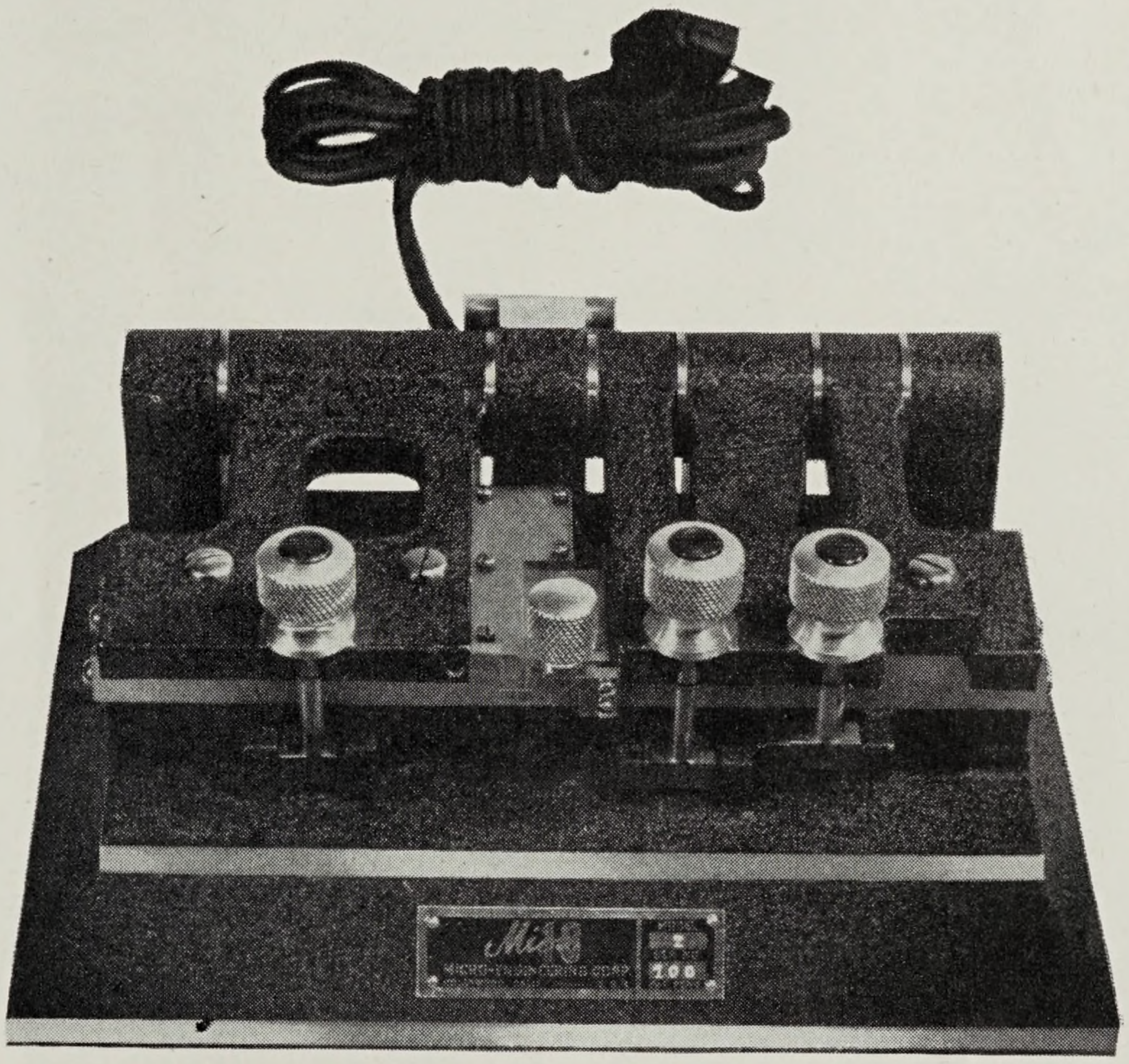
Copyright 1945 by A. S. C. Agency, Inc.

●

Entered as second-class matter Nov. 18, 1937, at the postoffice at Los Angeles, California, under the act of March 3, 1879.

66

NOW a *professional* 16 mm splicer



$147.50

constant temperature hot splice

PERFECT AUTOMATIC REGISTRATION AT SPLICE REGARDLESS OF FILM SHRINKAGE

splicer operation:

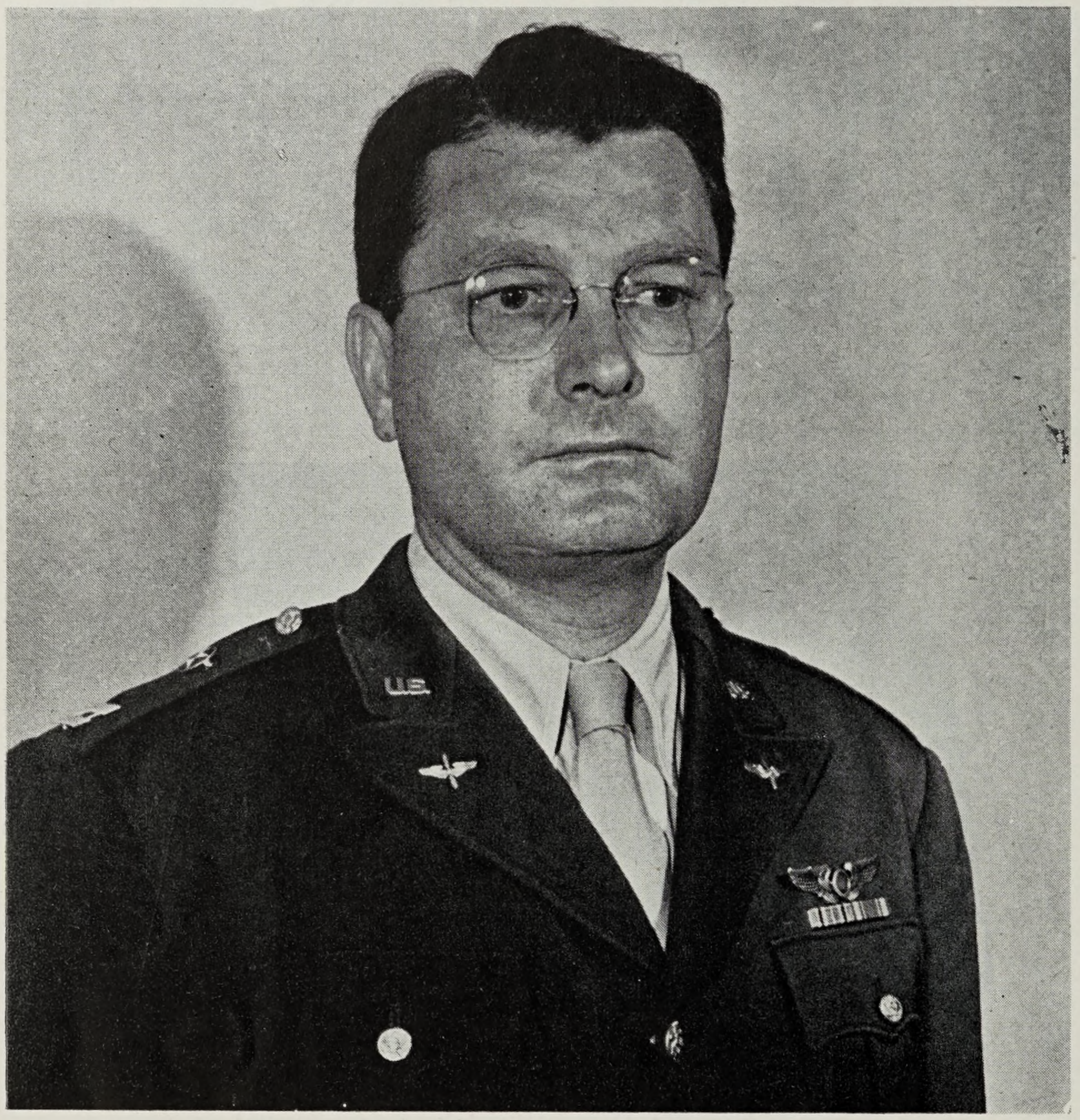
1. ONE SCRAPE CUTS .0015 DEEP, .070 WIDE
2. ONE OPERATION CUTS ENDS, LOCKS AND CEMENTS FILM.

PRECISION ENGINEERED THROUGHOUT • CARBOLOY SCRAPER BLADE (SEMI-AUTOMATIC) • OILITE BEARINGS • HARDENED & GROUND STAINLESS STEEL BLADES • WRITE FOR CATALOGUE

MICRO-ENGINEERING CORPORATION

211 GUARANTY BUILDING • HOLLYWOOD 28, CALIF.

CINEMATOGRAPHY IN THE WAR



ARMY AIR FORCE TRAINING FILMS

WITH CAPT. TOM TUTWILER, A.SC.

Now that the war is over, the "top secret" and "confidential" activities of various services are off on disclosing intimate details of the importance of cinematography in waging a winning battle over the enemy. In starting this series of "Cinematography at War," articles on the use of motion pictures on the home and battle fronts will be published detailing the experiences of members of the American Society of Cinematographers in various phases of the services.

AAF training films played a most vital part in accelerating the instruction of air force pilots and personnel when speed was essential. Air Force heads early realized the importance of visual training to supplement class and textbook instruction, and made maximum use of films in the domestic training program.

In presenting various phases of production of AAF training films, the experiences of Capt. Tom Tutwiler, A. S. C., provide a typical history of the motion picture instruction program of that branch of the service. Tutwiler, who received commission of first lieutenant with the original AAF First Motion Picture Unit in February, 1943, entered the service after more than 15 years' experience in Hollywood studios where he mainly worked on special effects photography at Metro-Goldwyn-Mayer. He was promoted to the rank of Captain while in service.

Captain Tutwiler, who logged more than 1,000 hours of flying time while functioning as a cinematographer with the AAF, estimates that this exceeds the total flying hours of any other AAF cameraman for the similar period of three years. Assigned to head an aerial camera unit immediately, Captain Tutwiler photographed air and ground footage in about equal amounts on his many and varied assignments.

These assignments covered all types of aircraft and models introduced periodically to do specific jobs. Films detailing the flying characteristics and various types of equipment of each model were made to not only intimately familiarize pilots in training in this country, but also to make the new models familiar with the flyers and crews on battlefronts where the new plane would be dispatched for service.

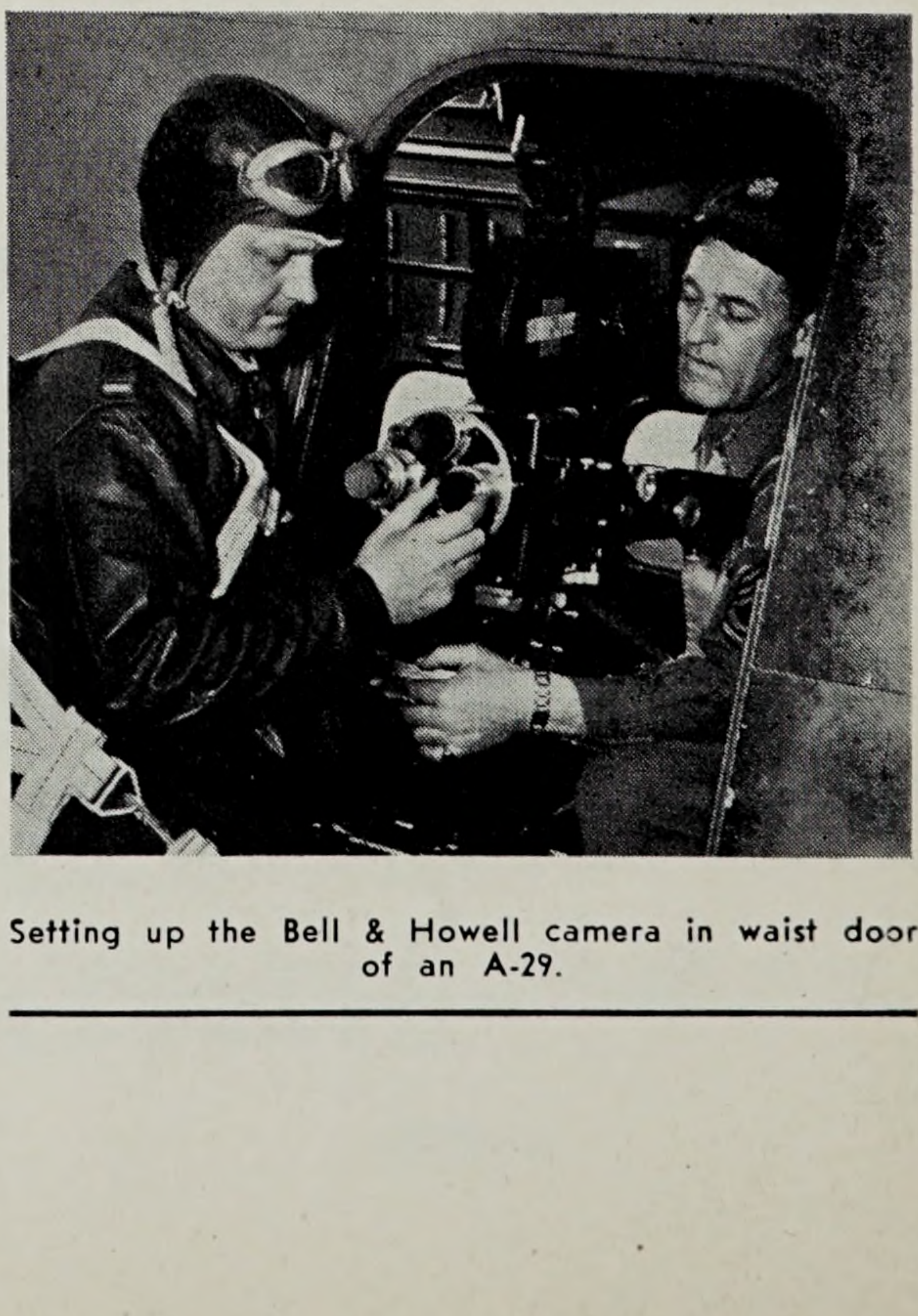
Included in each film as standard footage was picturization of the air performances of the individual types of planes, including maneuverability, take-off, landing, flying characteristics and other features for the knowledge of the pilots in the field and in training.

Small Crew

In handling the assignments, which necessitated location trips to various fields where the different plane models were being tested or flown for the filming, Captain Tutwiler carried a small crew of only one assistant cameraman and one grip. This compact unit capably and efficiently handled the work to be done, although individual fields generally supplied trucks when required during filming operations.

Detailed Scripts Provided

The film project on a new type plane, or instructional picture of various phases of operation was always carefully planned and set up in advance in script form for the cameraman assigned to the job. When a project was requested, the AAF First Motion Picture unit dispatched one or more writers to



Setting up the Bell & Howell camera in waist door of an A-29.

the particular field or base to prepare a suitable script. On this preliminary work, an officer at the base familiar with the film requirements was assigned as technical advisor and liaison to work closely with the writer to familiarize the latter with what was required and to provide necessary technical information and performance features of the plane that was to be the subject of the film.

After the script was okayed by the commanding officers of the particular base, the camera unit was sent along from the Culver City base to launch production. During this period, also, the officer functioning as technical advisor was constantly with the camera unit to advise and assist in the filming.

Cramped Setups on Planes

In his numerous photographic expeditions for the Air Force, Captain Tutwiler covered a territory embracing air bases all over continental United States, and he was also on many filming missions that extended far out over the Atlantic, Pacific and Caribbean waters.

For aerial photography, where the camera plane had to follow the subject plane, Captain Tutwiler continually found himself in cramped quarters. For example, operating the camera from the tail of a B-29 required that he be on his knees for the entire trip. On other occasions, he had to crawl through a plane to the camera position, and then operate while on his side in a prone position. The only time he could stand up and operate the camera comfortably, Tutwiler discloses, was from the turret of an AT-11.

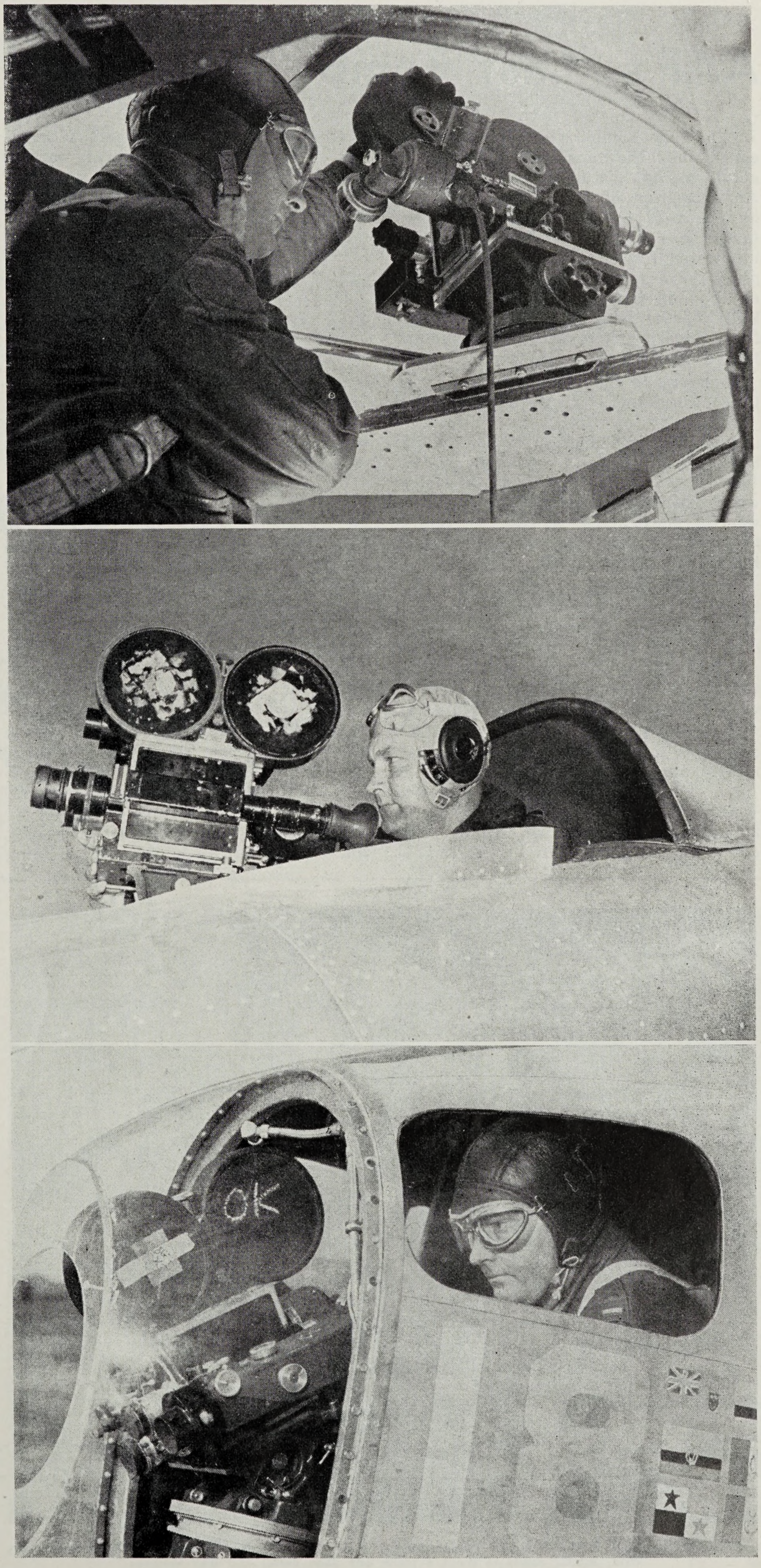
Although shooting was from odd and uncomfortable positions most of the time, Captain Tutwiler discloses that he never photographed through plexiglas—but always out of the nose, tail, waist or turret of the camera planes. This required that the cameraman take a tough beating while shooting; and either winter or summer, the trips were decidedly cold.

Special Camera Planes

Major Frank Clark was OIC of the Flight Echelon attached to the First Motion Picture unit, and his division supplied the camera ships and pilots for the various film expeditions in all parts of the country. Major Clark had under his command a group of pilot-officers who were experienced in operating camera ships for film production, which resulted in not only better aerial photography overall, but saved immeasurably in production delays that would have existed if unskilled film production pilots had been assigned at each particular field.

Principal types of camera planes used were Lockheed Hudsons and the B-25

(Continued on Page 68)



AERIAL PHOTOGRAPHY CAMERA POSITIONS for AAF training films—top, shooting from turret of an A-29; middle, setup in turret of an A-11; bottom, from the nose of an A-29.

AAF's "Last Bomb" Sensational

"The Last Bomb" is one of the greatest—if not the tops—in the series of actual combat picturizations of the war. An exposition of the details of attack by the B-29 Superfortresses on Japan in the late months of the war, nothing in printed form could more clearly explain the devastation and ruin wrought on the Jap homeland and the impossibility of the Nips continuing to resist, than this epic from the motion picture files of the Army Air Forces.

Members of the American Society of Cinematographers were privileged to witness one of the first—if not the initial—showing, before a semi-public audience on the night of January 21, 1946, at the A. S. C. clubhouse in Hollywood. General consensus was that this was the finest and most spectacular film to be issued from the war activities of the United States forces.

Specific showing was arranged through the courtesy and cooperation of Frank Lloyd, veteran motion picture director and former major in the AAF photographic unit who was recalled from civilian life to function as director of the unit undertaking the enterprise.

Several members of the American Society of Cinematographers were closely identified with the making of "The Last Bomb," including Major Wilfrid Cline, who had previously spent 20 months in China as commanding officer of the 16th Air Force Combat Camera Unit; Captain Gilbert Warrenton, A. S. C., who was several years in the South Pacific battle area; and Captain Tom Tutwiler, A. S. C., who shot the sequence of P-51 maneuvers for inter-cutting into the subject.

Picture was made entirely in 16mm kodachrome, with the exposed film planed back from the Philippines, Marianas and Iwo Jima to Honolulu with escort AAF officers for processing at the Eastman kodachrome processing laboratory in Hawaii in record time. Subsequently, 35mm color blowups were made by Technicolor, which will eventually make the release prints when the picture is shown generally in the theatres of the world.

The film, which was made in a total of five months, was planned to give the American public an insight into the details of a multi-plane bombing raid on the Jap homeland. Some reports state that the heads of AAF, after checking the most favorable public reaction to the Navy's "Fighting Lady" (which was a documentary in which much of the filmed material was scripted and shot in advance through cooperation with a Hollywood studio), decided that the Air Force could top the sensational audience qualities of "Fighting Lady" with a film on the concentrated bombings of Japan.

Whether or not this report is correct, the final result is sufficiently thrilling to justify all the effort expended by the AAF and its most proficient motion picture division. There is no doubt but what—even with the war terminating with abrupt suddenness—"The Last Bomb" will be released generally via theatres throughout the world to give everyone an opportunity to view the terrific and overwhelming air forces directed at the Nip homeland.

"The Last Bomb" is a "must see" for every American, and will also provide audiences in other countries with the "know how" of the United States in organizing and waging air war—no matter what the distance or difficulty.

Picture depicts the planning, start, flight, etc., of a 500 B-29 raid on Jap targets—two air plants. The big planes are shown in takeoffs from the Marianas in flights; the pickup of P-51 fighter plane escorts off Iwo Jima, and the run to the Japan islands. Over the target, the bombs drop more numerous than salmon on a spawning run, while the P-51s engage the intercepting Jap fighter planes in sensational air battles.

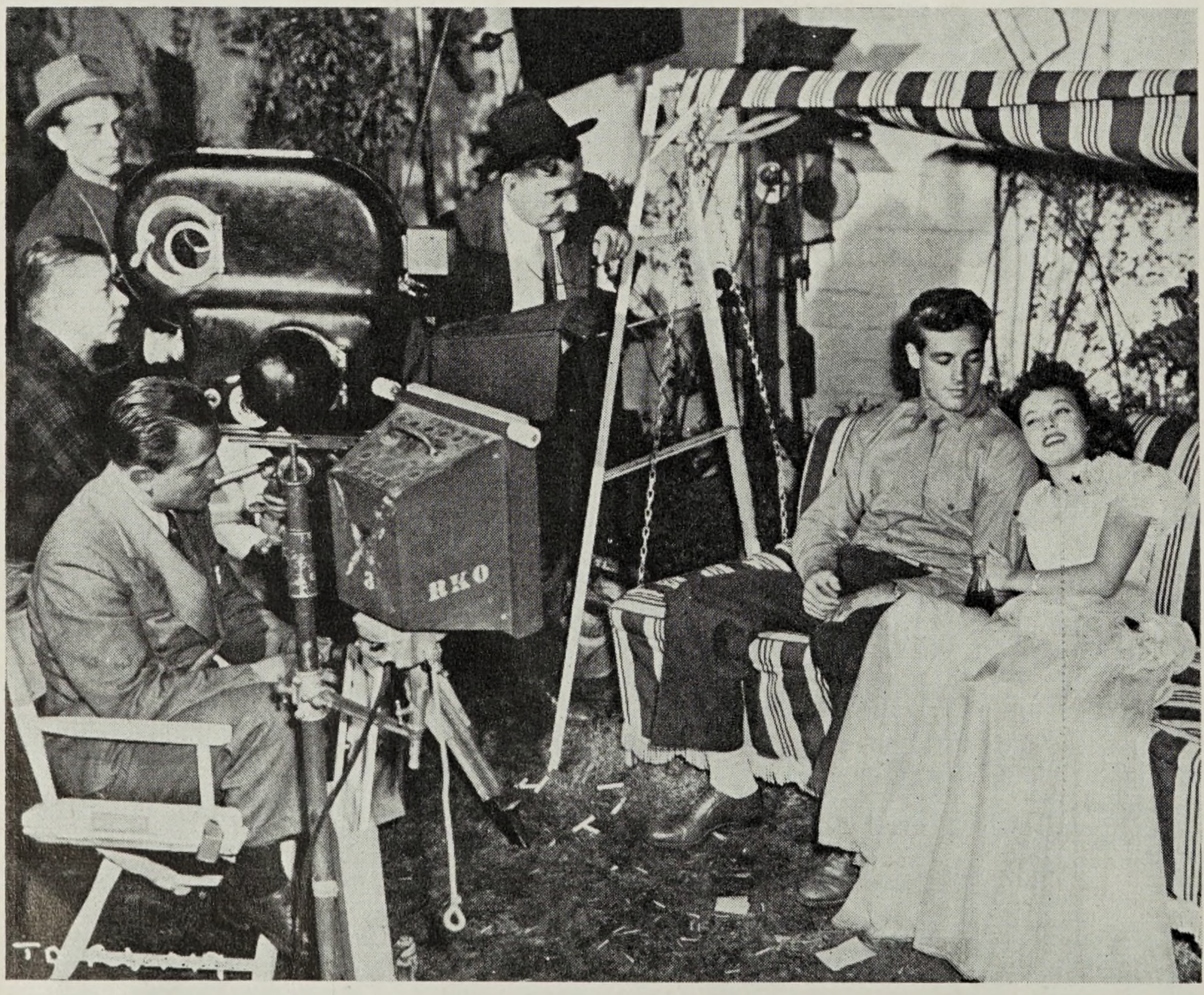
Direct hits—from 12,000 feet—on the objectives are vividly seen in the orange flashes and glows below. There are several shots from the big bombers to give the onlookers a visual thrill of the devastation and ruin which had previously been visited on Tokyo via air attacks.

While the bombers go about their work, the P-51 fighters battle the Jap fighter planes. Through medium of GSAP (gun sight aiming point) cameras synchronized with gunfire on the fighters, the blasting of the Nip fighter planes is vividly depicted. When hit by shells, the Jap planes shudder as if suspended on a string in the breeze—emit smoke or catch fire—and go into crashes or fall apart.

When the bombers have completed their missions and turn for home, a portion of the fighters stick close by as escorts to prevent delayed raids by the tricky Jap fighter pilots. But other fighters peel off for strafing runs over power lines, trains, factories, airfields, shipping, etc. This sequence of about 10 minutes duration on the screen, surpasses anything else that has been seen in this war; and will be the tops until something better might come along.

Final sequence shows the Iwo Jima base, where crippled B-29s are forced to land due to gas shortage or being crippled in the battle. Several episodes provide maximum thrills when the big planes are forced to belly-land on airstrips or close waters to save the lives of the crew members. Most thrilling is the continual effort extended to save the lives of the pilots and crews, no matter how great the danger to the rescuers.

"The Last Bomb" is a most vivid motion picture of this war—it is certain to be one of the greatest documentaries for preserving the peace for many years to come. Every person—both in the United States and the world—should see it and realize the fallacy of embarking on any future war.



ON THE SET of RKO's "Till the End of Time." Director Edward Dmytryk and Director of Photography Harry Wild, A.S.C., ready to shoot a scene with Jean Porter and Guy Madison.

At Your Service!
the staff of

J. E. BRULATOUR, INC.

with

EASTMAN
FILMS——

J. E. BRULATOUR, Inc.
NEW YORK • CHICAGO • HOLLYWOOD

The Subjective Camera

By HERB A. LIGHTMAN

The camera is the "eye" of the motion picture. It is not merely a mechanical thing of cogs and wheels and optical glass that records an image on a strip of film. Rather, it is an artistic tool—like a painter's brush, or a sculpter's chisel. In the hands of a craftsman it becomes the instrument through which a dramatic story can be placed on film—so that later on, in darkened theaters all over the world, vast audiences can see the film, react to it, and be entertained.

Psychologically, an audience responds as strongly to creative camerawork as it does to clever direction or powerful acting. For the camera has "point of view" and the audience will see the story only as the camera sees it. For this reason, the camera's approach to a specific scene must be in key with the concept of that scene as set down in the screenplay, and with the pattern of action worked out by the director.

Usually the camera maintains the role of a detached observer of the story. It is not, in itself, a part of the action—so it simply stands by and records what goes on, assuming whatever angle will best portray that action. When this is the case, and the camera remains apart from the action itself, we say that the camera is "objective." A vast majority of the action in most photoplays is filmed with this approach.

Occasionally, however, the camera steps out of its role as casual observer and becomes a participant in the story. In so doing it assumes the point of view of one of the characters, and what appears on the screen is what that particular character sees in a certain filmic situation. Thus, the camera actually becomes his "eye," and when this is the case we say that the camera is *subjective*.

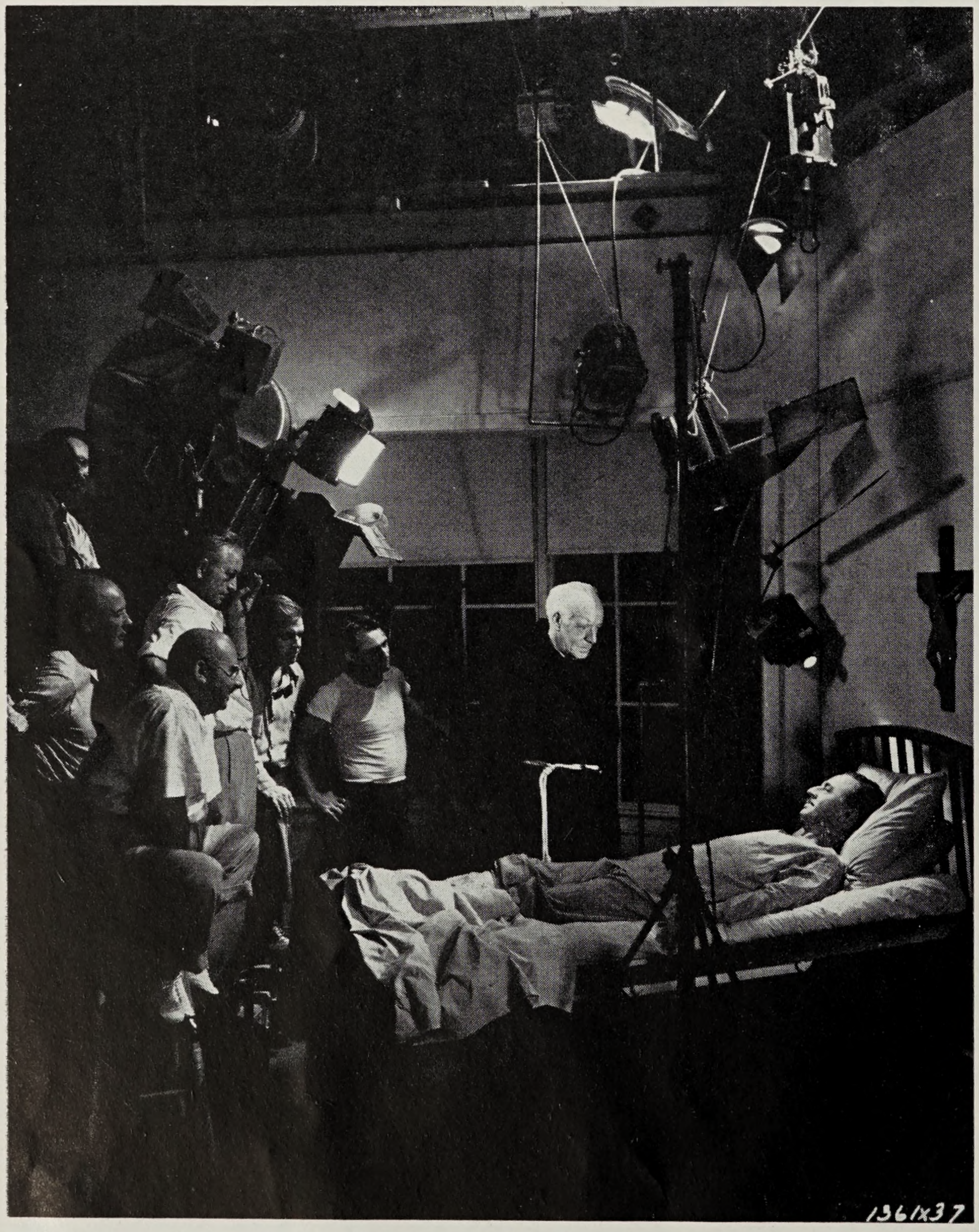
This technique, in itself, is not entirely new. Even back when the movies were young a character could scarcely be represented on the screen as being drunk without the audience's being treated to a revolving prism shot of his multiple D.T.'s. But, just as motion picture technique in general has outgrown obvious forms of trickery, the subjective treatment as used in Hollywood today has become a smooth, subtle way of putting the audience into a character's "shoes." It is dynamic without being clumsy.

The psychological effect of this device on the audience is direct and potent. The modern photoplay appeals principally to the emotions. For this reason, it is desirable that an audience participate subconsciously in the action that is taking place on the screen. When a person viewing a film can lose himself in the story and react vicariously to the emotions of the actors—then he is quite apt to leave the theater with the glow of satisfaction of having seen an entertaining film.

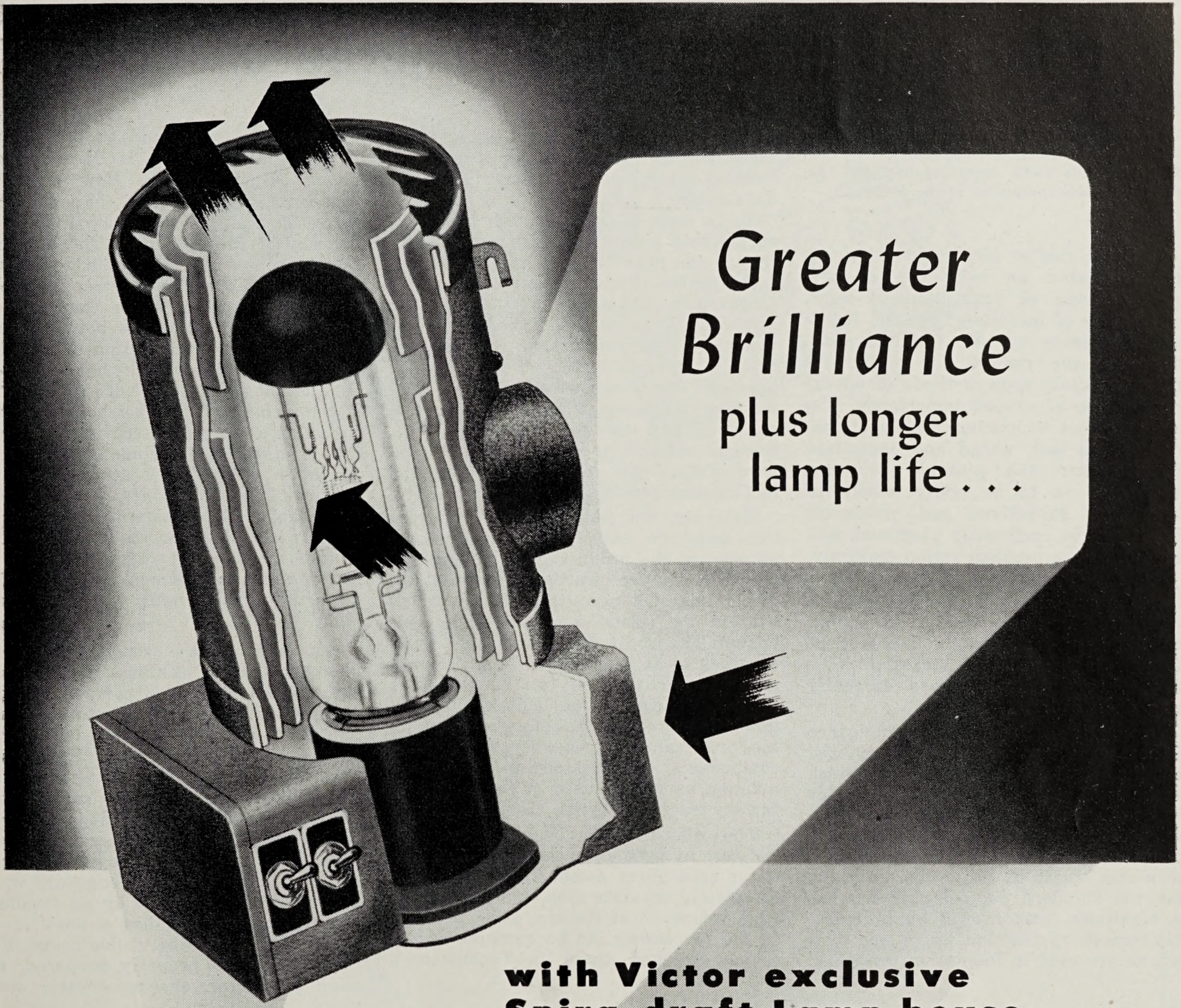
The subjective approach, when well executed, tends to bring the andience *into* the picture. It is allowed to see part of the action as it appears to one of the characters, and it will subconsciously experience the same reactions he does.

In several recent Hollywood photoplays there have been some excellent examples of this technique in use. In the film: "The Lodger," directed by John Brahm and superbly photographed by John Seitz, A.S.C., one sequence concerned the murder of a dowdy London charwoman who had stopped by at the pub for an "arf 'n' arf" before going home. By previously established motivation the audience knew that the killer was waiting in her little shack. But when the camera followed her into her room the murderer was not once shown. Instead, the woman started to remove her clothes, whirled about as she heard

(Continued on Page 66)

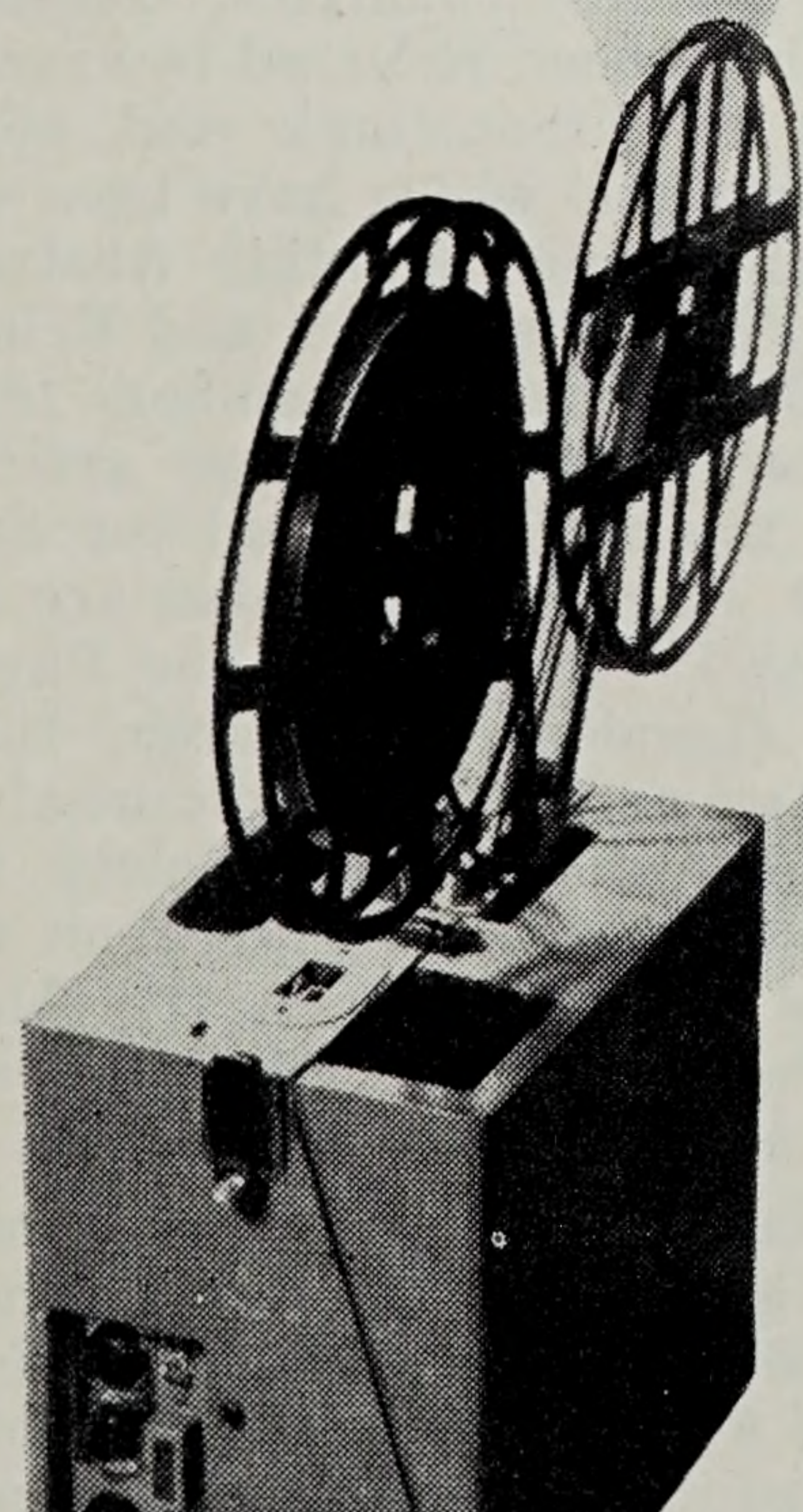


DETAILS OF UNUSUAL LIGHTING on close shot of William Powell and Lewis Stone for Metro-Goldwyn-Mayer's production, "The Hoodlum Saint." Director Norman Taurog is seated on stool in left foreground, with director of photography Ray June behind Taurog making final check of the scene before shooting.



Greater Brilliance plus longer lamp life . . .

with Victor exclusive Spira-draft Lamp house



The Animatophone—16mm Sound Projector—First in the Field

During projection, lamps get hot . . . *very* hot. But only in the Animatophone this condition is anticipated and alleviated with Victor's exclusive *Spira-draft* lamp house. Only on the Animatophone is the cooled air forced in a spiralized, all-over, fast-moving stream through a multiple wall to dissipate heat more efficiently.

Result . . . longer lamp life, clearer pictures. And remember, on the VICTOR, the lamp has a standard base, obtainable anywhere, at no extra cost.

Here's another outstanding feature that gives the Victor Animatophone its leading position in the 16mm industry.

SIGHT • SOUND • SEQUENCE

VICTOR

REG. U.S. PAT. OFF.

16 MM

Victor Animatograph Corporation

Home Office and Factory: Davenport, Iowa
New York (18) McGraw-Hill Bldg., 330 W. 42nd St.—Chicago (1) 188 W. Randolph
MAKERS OF 16MM EQUIPMENT SINCE 1923

Report of the SMPE Committee on Color

(Presented at Oct. 17, 1945 Technical Conference of the Society of Motion Picture Engineers in New York, and published in SMPE Journal of Dec. 1945. Reprinted by special permission of the SMPE.)

As the motion picture industry undertakes an ever-growing percentage of production in color, the matters of increasing present facilities, of opening up new facilities, and, above all, the removal of limitations and restrictions upon methods of operation, become of utmost importance. The engineers and technicians of the industry need to look ahead and formulate the problems and possible solutions thereof, so as to be ready wisely to advise the executives and producers who, it can be confidently predicted, will wake up to the problem rather suddenly.

It is from this point of view that the Color Committee of the Society of Motion Picture Engineers wishes to emphasize the importance to the industry of the new high sensitivity caesium-antimony phototubes which are currently being described.

In order to appreciate the significance of these cells it should first be realized that the great majority of dyes which can be used in the production of color film are transparent to the near infrared region of the spectrum and consequently are unsuitable for use as components of the sound track, if, as is currently the case, the standard photoelectric cell has its maximum response in that region. This remark applies equally to acid dyes such as are used in imbibition processes, to basic dyes as used in dye-toning processes, and to the insoluble dyes produced by the aid of color formers and color developers.

To be sure, there are a very few dyes or suitable pigments which are absorptive in the near infrared region—ferric-ferrocyanide (the usual iron-tone) is the outstanding example. If, then, ferric-ferrocyanide is used for the cyan component of the picture, a satisfactory track, absorptive in the infrared, can be produced simultaneously with the cyan picture component without the requirement of any special processing steps. Such prints and tracks have been widely used in the 2-color field, as, for example, in Cinecolor prints.

However, the methods which produce this iron-tone image cannot in general be used in the production of yellow and magenta images. Furthermore, the use of this pigment permits no choice whatever in the selection of the cyan component. The iron-toned image for the picture has to be accepted as it is. So as a general conclusion, it can be said that the picture components suitable for the imbibition process, the color-former process, or for any process wherein the three components are treated in a common manner, cannot be used to form a satisfactory track absorptive to infrared rays.

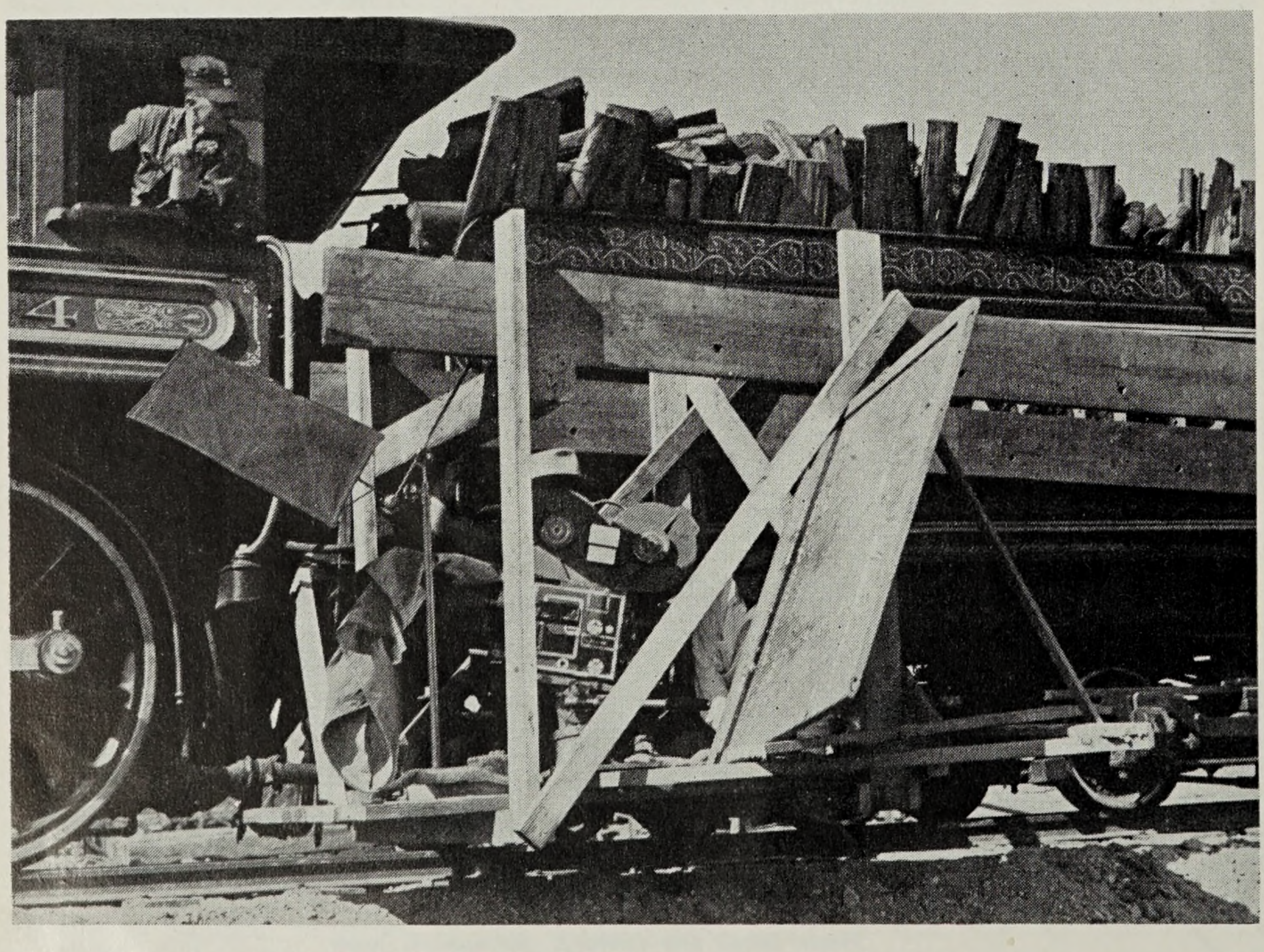
This difficulty has been overcome in the past by producing the sound track in silver or a silver compound, either by a completely separate step, or by means of edge treatment of the film at some stage of the processing. As an example of the former method there is Technicolor's black silver track, and as an example of the latter there is Kodachrome's silver sulphide track. Now either of these methods resulted in added expense—in the latter case, because of the delicacy of the operation. The boundary of the area of action of the edge-treating fluid, whether applied to track alone or to picture alone, must be confined to a zone only 0.015 in. wide between track and picture, and the action of the fluid must be absolutely uniform across the zone of the application with no variation in the vicinity of sprocket holes; yet agitation as a means of securing uniformity is obviously excluded. A delicate operation of this sort requires, on the one hand, careful control, and on the other hand, the constant threat of reduced yields and increased costs. Quite a number of patents have appeared describing various chemical and mechanical methods of performing this edge treatment.

But now, if the sensitivity of the phototube can be confined to the visible range, then the same components that are used to make up the picture can also be used to produce the track without the necessity of edge treatment. It was with this thought in mind that an earlier Color Committee (in 1937) called attention to the desirability of finding or producing such a tube. At about that same time a photosensitive alloy was discovered by a German investigator, which alloy, when illuminated by an incandescent tungsten lamp, has a peak of response well inside the visible range. Furthermore, when properly prepared, this alloy possesses very remarkable sensitivity.

The development of phototubes containing this alloy has apparently been considerably retarded by the war, though various constructions containing it have appeared in several countries. German-made tubes have been referred to in various articles in Kinotechnik and other German magazines, which have been abstracted in the Kodak Monthly Abstract Bulletin for November, 1943, and February, May, October and December, 1944. A translation of one of these articles appeared in the SMPE Journal for September, 1944. English-made tubes are described in the Proceedings of the Physical Society (London) for March, 1943, and also in an article in the Journal of the British Kinematograph Society for January, 1943. The U. S. patent on the alloy is now in the hands of the Alien Property Custodian and licenses are available to anyone at a nominal fee.

For use in projectors it seems most desirable to arrive at a phototube which will have about the same output as does the ordinary Ag-O-Cs tube. A tube which meets this requirement and which is mechanically and electrically interchangeable with the present 868 type has been

(Continued on Page 62)



PHOTOGRAPHER BEHIND TWO-BY-FOURS—An intricate camera position to film a train sequence for David O. Selznick's production of "Duel in the Sun."

72 hours

Color Correct—16MM prints in 72 hours.

Fast! Yes—but delivery guaranteed.

Full fidelity of sound and definition
often exceeding the original.

For superior work—*ahead* of time—
"Byron-ize" your prints.

Byron

the most complete 16 MM sound studio in the East

Studio: 1712 Connecticut Ave., N.W. Phone Dupont 1800
Washington 9, D.C.

THROUGH the EDITOR'S FINDER

Although reports from London state that the British critics were lukewarm to the premiere of Gabriel Pascal's "Caesar and Cleopatra," when the production opened there last month; it does not follow that the picture will not be box office in both Great Britain and the United States. Financed by J. Arthur Rank to the tune of around $5,000,000 to make it the most expensive released negative to date (although David Selznick's "Duel in the Sun" is said to be in excess of that figure while currently in the editing stages) "Caesar" encountered production problems and delays of unusual character to send costs zooming to astronomical figures.

"Caesar" has to roll up world grosses of terrific amounts to recoup its negative cost. But Rank is too great a business realist not to realize that the picture cannot be forced onto the public unless it carries entertainment values. He will be satisfied with returns that might get back a large portion of the outlay, and figure whatever losses eventuate will be valuable in the long run by providing a showcase picture of British production to catch attention of both theatre men and the public to the effect that England can turn out pictures comparable in general production quality to the best in Hollywood.

This brings to mind the fact that a high cost production does not necessarily guarantee box office merit. During the past two years, there have been at least five or six productions from the Hollywood major studios that were unable to recoup negative costs of $2,500,000 and upwards. Some were even on Academy Awards nominations, which attested to the fine artistic and production merit of the pictures. But, for some reason or other, they failed to catch attention of the paying public—even in these lush days of box office happiness.

Films for Fire Dept. Reports?

Stopping the other day to survey the damage of what had been a pretty good-sized fire a few hours previously, we were surprised to see the arrival of an officer of the fire department—apparently an investigator sent to the scene to make out a complete report on the specific blaze for the study by the fire prevention bureau. Accompanying him was a fireman equipped with a press graphic camera, and bags of both bulbs and holders. Methodically, the officer inspected all sectors of the exterior, directing the photographer to shoot various phases. The pair then moved into what was left of the building and debris, and the flash bulbs were popping constantly.

The incident impressed one as being important as another important use for photography. If we had delayed longer, perhaps another fireman would have arrived equipped with a 16 mm. camera and a couple of portable lights to secure a more visual picturization of the damage. How much better to secure films of such an incident for runoff to the heads of the department and the fire prevention bureau, who could study the entire situation carefully and in detail over and over, than to have an individual—no matter how discerning and capable—checking over the scene and making a report from just one individual's observations, as has previously been the case.

As one well-versed individual who has been connected with films for many years recently observed in a gabfest, 16 mm. films can be much more valuable than multi-paged reports or symposiums on situations or events where higher executives or officials have to be given details.

In the specific case of use of films by fire departments, there's an opportunity for the semi-professional and amateur cinematographers in smaller communities to make valuable civic connections by offering to photograph fire ruins for the local departments to study at leisure. And the chores would be right in line with personal pleasures of cinematography.

Peak Color Capacity

It is interesting to note that the color processing laboratories, Technicolor, Cinecolor and Magnacolor, are all at peak production capacity in turning out prints of features and shorts for the film producers. Technicolor, which supplies by far the largest annual footage of color films for the industry, has scheduled present capacity of its laboratory for many months in advance. And the company can do little to increase its capacity to take care of major producers' requests for more color releases. Although property has been purchased and plans drawn for a large addition to the present Technicolor plant, there's the problem of getting the necessary building materials for construction. Further, there are also the important factors of building the highly-precisioned processing equipment necessary, and the training of additional laboratory workers to handle the added volume of output.

Cinecolor, which is a two color process, also is enjoying capacity through contracts for features and shorts of the studios. Limited capacity of its present plant prevents taking on any further commitments at this time. Metro-Goldwyn-Mayer was the first major company to utilize the Cinecolor bi-pack color for production of a feature, "Star From Heaven," which was recently completed with John Boyle A. S. C., as director of photography. Hal Roach, in resuming production activities to make a series of 12 Streamliner features for United Artists release, contracted with Cinecolor for the latter process on the entire series. Roach also wisely signed Boyle to a contract to take responsibilities of director of photography on the group.

Magnacolor method, also a bi-pack similar to Cinecolor, has also taken a splurge of activity, and now holds contracts for processing for its present limited capacity. But the overall picture demonstrates that the producers realize the box office values of color features, and are impatiently looking forward to the time that virtually all releases will be in color to add to the audience appeal of the product.

Strikes Delay Projectors, Etc.

Industrial strikes in the midwest and east will materially slow movement of 16mm sound-film projectors and both 8 and 16mm cameras, if those strikes continue for any appreciable length of time. This information is disclosed by a distributor who points out that anticipated early and wholesale delivery of 16mm equipment is delayed due to inability of the manufacturers to secure necessary accessories from subcontractors. Let it be plain that there is not—at this time—any indication of strikes or labor troubles in the factories of the projector manufacturers. But the latter depend on smaller plants for certain accessories that go into the final assembly, and that's where the bottleneck will be. In view of this, we recommend that prospective purchasers of projectors and cameras of 8 and 16mm sizes exercise patience with the manufacturers, distributors and dealers.

Film Stockpiles Low

Film trade papers have, during the past several weeks, reported that 35mm negative and positive raw stock is not too plentiful at the present time. If such is the case, there's logical reasons for a certain percentage of decline in volume of manufacture by the raw film companies. It must be remembered that—for at least five years—the latter operated the plants on a 24 hour a day basis. Machines and equipment were kept operating with only makeshift repairs in order to turn out the large

(Continued on Page 70)

"For perfection in lighting, it must be carbon arc lamps." **Ernest Haller, A.S.C.**

NATIONAL CARBON COMPANY, INC.

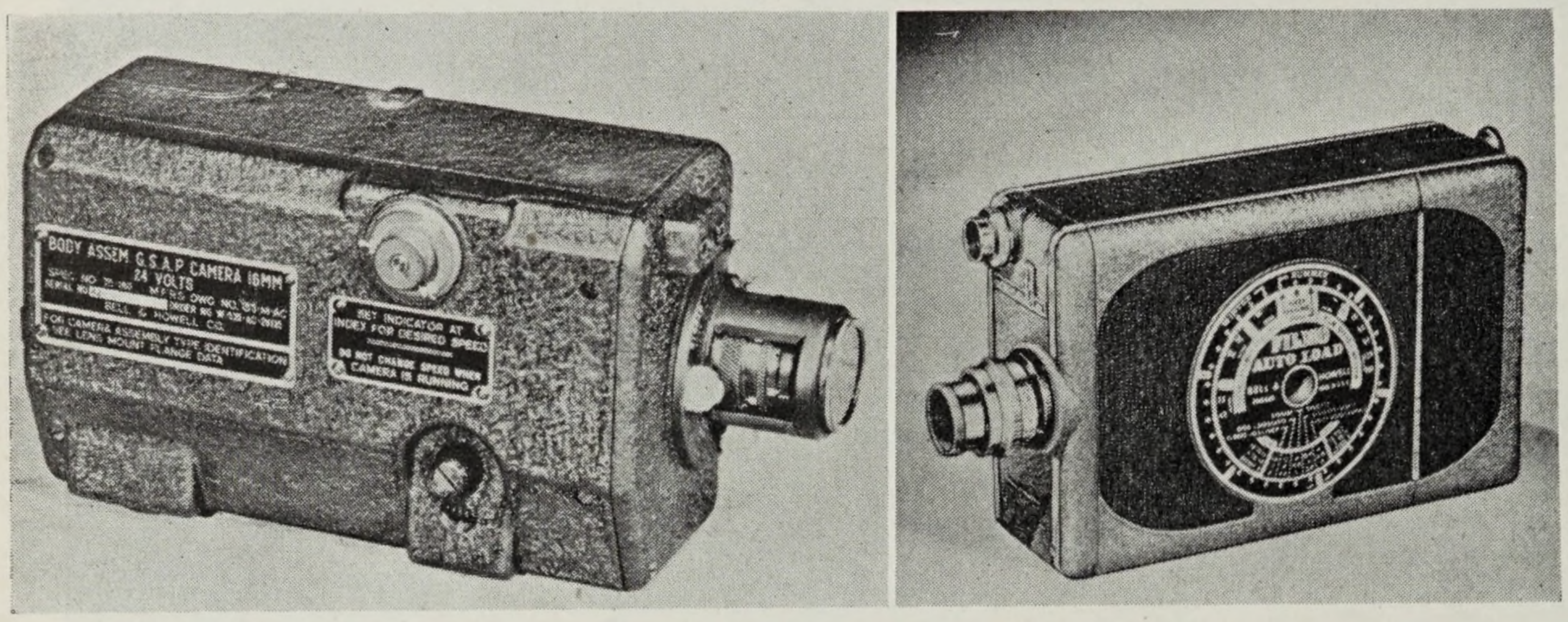
Unit of Union Carbide and Carbon Corporation

UCC

General Offices: 30 East 42nd Street, New York 17, N. Y.

Division Sales Offices: Atlanta, Chicago, Dallas, Kansas City, New York, Pittsburgh, San Francisco

Bell & Howell Introducing New 16mm. Auto Load Camera


BODY ASSEM G.S.A.P CAMERA 16MM
24 VOLTS
BELL & HOWELL CO.
SET INDICATOR AT INDEX FOR DESIRED SPEED
DO NOT CHANGE SPEED WHEN CAMERA IS RUNNING
FILMO AUTO LOAD

The famous "Guzap" camera used by the armed forces to record aerial gunnery effects during combat and training; provides improvements for the new Bell & Howell 16 mm. Auto Load Camera.

Battle-tested and proved under the rigors of war, the new and improved Bell & Howell Filmo Auto Load 16 mm. magazine loading camera will soon be appearing for sale to the public.

Many features of this camera point to its becoming popular in the 16 mm. field. First of all, film threading is effortless. A pre-threaded film magazine is inserted into the rear of the camera, the door is closed and the camera is loaded. Film can be interchanged in mid-reel due to the shutter action on the film magazine. This shutter is opened automatically when the film magazine is inserted, and is closed automatically when the magazine is withdrawn.

A viewfinder of the "positive" type, fully enclosed within the camera for protection, is standard equipment. The "positive" type viewfinder eliminates eye-parallax, one of the most frequent causes of poorly composed pictures. Four years of painstaking research were employed on this finder; result, an image 2½ times brighter than before. One of the most desirable assets is the small size and light weight of this latest Filmo. Measuring 1¾ by 3½ by 5¾ inches and weighing only 2 pounds 7½ ounces, it is easily carried in a coat pocket for instant use. Despite its small size, professional results are still obtained.

The Auto Load will be available with any of several fine, fast lenses, fully color corrected to produce excellent movies both in color and black-and-white. Telephoto lenses for distant work, and wide-angle lenses for close quarters are instantly interchangeable. Lenses sold by B & H will be specially coated to provide greater clarity of pictures (eliminates "ghost").

A choice of two models can be had, the Filmo Auto Load operating at 8, 16, 24, and 32 frames per second and equipped with a 1" F 2.5 U. F. lens, or the Filmo Auto Load Speedster operating at 16, 24, 32, 48, and 64 frames per second mounting a 1" F 1.9 F. M. lens. Otherwise, the two cameras are identical.

Most of the aerial combat pictures of this war were taken with Auto Load Cameras modified and specially adapted for that purpose. The Armed Forces' name was Gun-Sight-Aiming-Point Camera, later nicknamed "Guzap." Equipped with a motor, heating device, and other secret modifications, it performed brilliantly.

State Dept. 16 mm. Films

The State Department of the United States has announced organization of a film section which will concentrate on production of 16 mm. films to be distributed both abroad and in this country.

Setup will combine members of the staffs of OWI and Office of Inter-American Affairs, and will be headed by John Begg, veteran official of State Department film division.

Atlas Educational Film Co. Under New Ownership

Atlas Educational Film Co. of Oak Park, Ill., producers of educational and industrial pictures for 32 years, has been acquired by a new corporation of the same name organized by the banking firm of F. S. Yantis & Co. Added capital provided by the new setup will provide for expanded activities of the company.

S. O. S. Cinema Vets Back

Five employes of S. O. S. Cinema Supply Corp. of New York, returned to their posts with that company last month, following release from service in the armed forces. Quintet included: Dominick Capano, Joseph Liguori, But Carlson, Ira Perry and William Allen. Two former workers with the company were killed in action during the war.

Color Slide Contests

Color division of the Photographic Society of America is instituting series of color slide contests to enable members of PSA to evaluate their work in that particular field, and to have an opportunity to win medals and ribbons in the contests. Initial event was held in January, with others to follow in February, March, April, and June of 1946, with entry deadline tenth of each month. PSA members may submit slides with no entry fee, non-members are charged $1.00 plus postage. Official entry blanks may be obtained from L. F. Plummer, 8320 Carpenter St., Chicago 20, Ill.

Second Canadian International Color Slide Exhibition of Photography will be held at Art Gallery of Toronto March 1 to 14, 1946, with entries closing February 11. Toronto Camera Club is sponsoring the contest, with entry fee listed at $1.00 by Chairman Sam J. Vogan, Box 25, Toronto 9, Ontario.

Ansco Moves Chicago Offices

Ansco has moved its Chicago branch to recently-purchased three story building located at 247 East Ontario Street, where both the sales offices, new laboratory for film processing, and shipping department will be consolidated under one roof.

New Filmosound Library Releases Announced

MOON LIGHT AND CACTUS (Universal) 6 reels

Returning serviceman has his troubles with women in war jobs—in this case in the running of a cattle ranch. But there is more than one solution of the woman question in the postwar world, though few will be quite as funny. (Andrews Sisters, Leo Carrillo, Elyse Knox, Eddie Quillan). Available from March 8, 1946 for approved non-theatrical audiences.

IN SOCIETY (Universal) 7 reels

A pair of plumbers go high-hat, and on Lou Costello that's particularly funny. The boys go to sea in a bathtub, ride a runaway couch down busy streets, ditto with a fire truck, and finally go fox-hunting riding a steer! (Abbott and Costello, Marion Hutton, Kirby Grant, Anne Gillis). Available from February 18, 1946 for approved non-theatrical audiences.

DANCE REVIVAL — INDIA 10 min.; (black-and-white and color prints)

Pleasant human tale of beautiful girl who becomes teacher of folk dancing in India. Essential dignity and religious import of interpretive dancing is brought out. Should help improve our understanding of Indian people and culture. Photographed in fine color in India by A. Patel, authentic music by Bhatodekar editing and narration by W. F. Kruse.

HOW MUCH PER FOOT?

LOOK at it this way:

A tremendous expenditure has been made before a single camera rolls. Staggering amounts have been spent on talent, meticulous sets, special skills, and equipment.

Recording all that investment on film makes the finished negatives a pretty valuable property.

That's the way *we* look at it!

And so every frame of Ansco Supreme is the finest film we know how to make. In grain, speed, and wide latitude, it has consistently proven true to the trust put in it. You can depend on Supreme.

Ansco

A DIVISION OF GENERAL ANILINE
& FILM CORPORATION

BINGHAMTON • HOLLYWOOD • NEW YORK

KEEP YOUR EYE ON ANSCO—FIRST WITH THE FINEST

Eastman Kodak Explains Research Status Of Professional Safety Film

Although progress is being made on research development for professional 35 mm. negative and positive motion picture film, prepared statement by Eastman Kodak Company cautions that many factors have to be considered before the non-inflammable type film can replace the present nitrate stock.

Ed Kuykendall, president of Motion Picture Theatre Owners of America, national exhibitor group, first asked for early introduction of the safety film stock for theatrical use in a bulletin to members several years ago. This was picked up by trade publications, some of which indicated that a changeover to non-inflammable print stock could be made within a short time.

However, as the Eastman information discloses, much has to be accomplished and a long time will undoubtedly elapse, before the industry secures the full benefits of Eastman's development and perfection of the safety film for production and theatre use.

The Eastman Kodak release states:

"In view of the numerous and sometimes inaccurate articles which have recently appeared on the subject of safety motion picture film, the Eastman Kodak Company has authorized the following statement covering their own position.

"Following the years of research and development, the quality of motion picture safety film, particularly with respect to its ability to stand up under theatre projection, has constantly improved. The Eastman 35 mm. safety film used in large quantities by all governmental agencies during the war performed satisfactorily under the conditions under which it was used. This included regular theatre projection but, generally speaking, the length of run to which these prints were subjected was considerably shorter than that for normal nitrate release prints.

"Numerous tests of safety film, both standard and experimental, have been made by Eastman in recent years in their own laboratories and under trade conditions. Such tests will continue. So far, however, both laboratory and trade tests have shown that the best safety film is not equal in wearing quality to nitrate. Any attempt to generally replace nitrate film with the present safety would inevitably result in substantially increased print damage and much higher print costs to the industry.

"No experience to date has indicated that safety base can be produced as cheaply as nitrate. When and if a completely satisfactory safety base can be made and sold in quantities comparable to the present output of nitrate, the price might be lower than the present 1.25 cent price of current safety positive, but there is no present prospect that it could reach the low price level of nitrate film.

"The outlook for the eventual transition of the industry to safety film continues to be hopeful. Improvements, however, are still essential and certainly no specific date for a possible shift to safety base can be set at this time."

Tiedeman Joins Ansco

Dr. John A. Tiedeman, until recently attached to the U. S. Naval Academy as a Commander, U.S.N.R. has been appointed director of Ansco's Education Department. For the past five years, Dr. Tiedeman was assistant head of the physics section at Annapolis. Previously, as a member of the faculty of the Woman's College of the University of North Carolina, he pioneered in offering a course in photography.

Bell & Howell Equipment To Be Manufactured In England

Tom Law of London, representing the J. Arthur Rank British group of companies, and Joe McNabb, president of Bell & Howell Company, are concluding agreements started with the visit of Arthur Rank to Chicago last June.

By the terms of the agreements, Bell & Howell Company of Chicago and British Acoustics, the engineering and manufacturing company of the Arthur Rank group, are entering into a long term period for an interchange of research, manufacture, and distribution of equipment and films.

British Acoustics will set up the complete manufacture in England of all Bell & Howell standard and substandard equipment including 16mm. sound and silent projectors, 16mm. and 8mm. cine cameras, and 8mm. projectors, as well as a wide range of accessories. The plants in England will be operated on Bell & Howell engineering and manufacturing methods. Distribution of products made in England will cover the British empire and certain countries in Europe and Africa. Duplicates of Bell & Howell tools and drawings, as well as consulting engineer,, will be winging towards the English coast shortly, it is expected.

The agreements also provide for an interchange of 16mm film distribution between the Rank 16mm libraries and Bell & Howell's Filmosound libraries. When in full operation, the deal will considerably strengthen the British field of equipment in the standard professional 35mm line as well as in the amateur and substandard lines and give England and the British colonies the counterpart of the production of the Bell & Howell equipment, manufactured in Chicago.

Blind Aid Invented by Joseph Walker, A.S.C.

Still another demonstration of the technical and engineering inventive abilities of members of the American Society of Cinematographers is seen in the widespread national attention and publicity accorded an electronic radar "seeing eye" developed by Joseph Walker, A.S.C.

Walker, in addition to being an outstanding director of photography in motion picture production, finds time to experiment and research on radio and electronic devices. His home workshop and experimental laboratory contains modern and exacting equipment generally only contained in the research laboratories of the electrical companies.

The "seeing eye" device is currently contained in a box the size of a portable radio, although Walker expects to get the instruments eventually into a case the size of a folding camera. Inventor Walker is no newcomer to radio and wireless, having assisted Dr. Lee De Forest in 1910 in tests of the world's first wireless telephone. He has turned over the device to the Braille Institute of America for further testing and development and along go the patents for which he has applied.

Apparatus in operation is best described as an auditory range finder for blind persons. Basically, it embodies photographic features in that two motion picture camera lenses set 10 inches apart on front side of the box activate a buzzer to earphones of the carrier through two photoelectric cells in the box. It is explained that the closer the carrier gets to an object in his path, the buzzing becomes more insistent. Special color filters, also adapted from cinematography, allow identification of colors through a wheel that turns the particular filters in front of the lenses.

Walker points out that the device cannot guide a blind person through traffic or crowds, but it will undoubtedly have limited uses for the sightless which will enable the latter to get around easier, especially at home or in familiar neighborhoods where landmarks are familiar through long association. Mainly, it will allow a blind person to take a turn around the block without recourse to the white stick method for tapping to ascertain that he is still in safe channels.

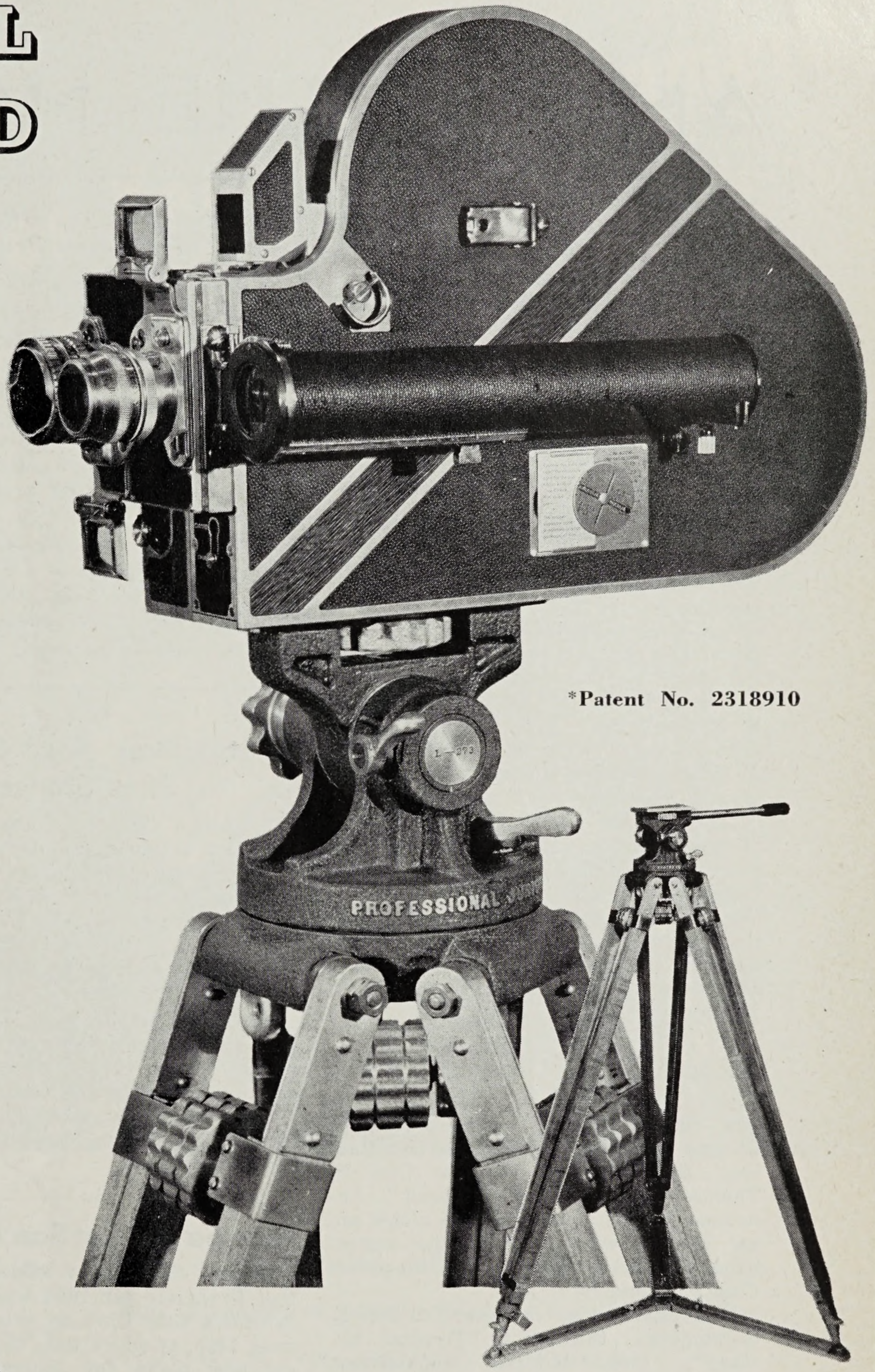
"PROFESSIONAL JUNIOR"* TRIPOD

with Removable Head Now Available!

Acclaimed the finest for every picture taking use.

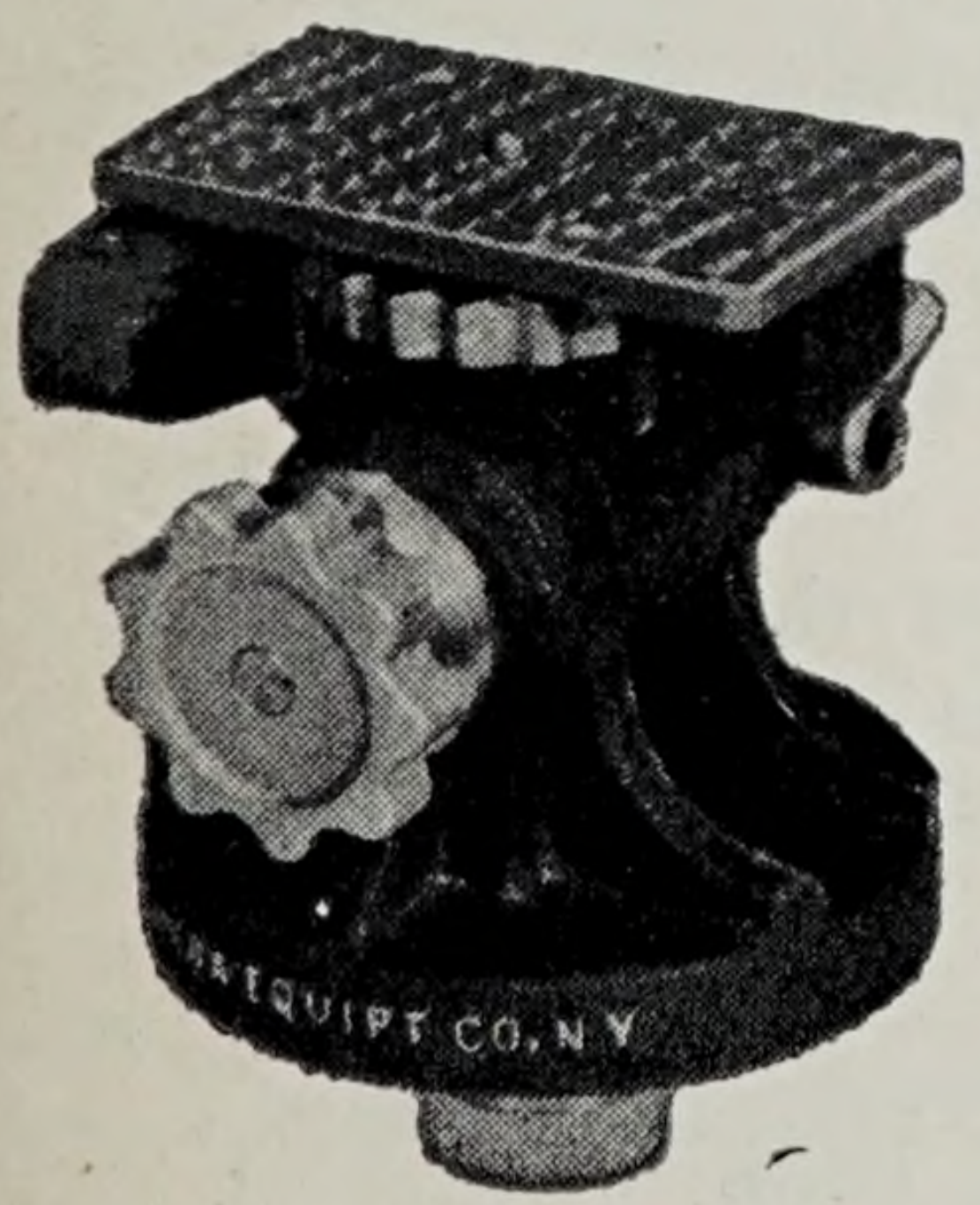
The friction type head which is unconditionally guaranteed for 5 years, gives super-smooth 360° pan and 80° tilt action. It is removable, can be easily mounted on our "Hi-Hat" low-base adaptor or Baby "Professional Junior" Tripod base. The large pin and trunnion assures long, dependable service. A "T" level is attached. The top-plate can be set for 16mm. E. K. Cine Special, with or without motor; 35mm. DeVry and B & H Eyemo (with motor), and with or without alignment gauge.

The standard size tripod base is sturdy. "Spread-leg" design affords utmost rigidity and quick, positive height adjustments. Complete tripod weighs 14 lbs. Low height, at normal leg spread, 42". Extended height 72". All workmanship and materials are the finest.

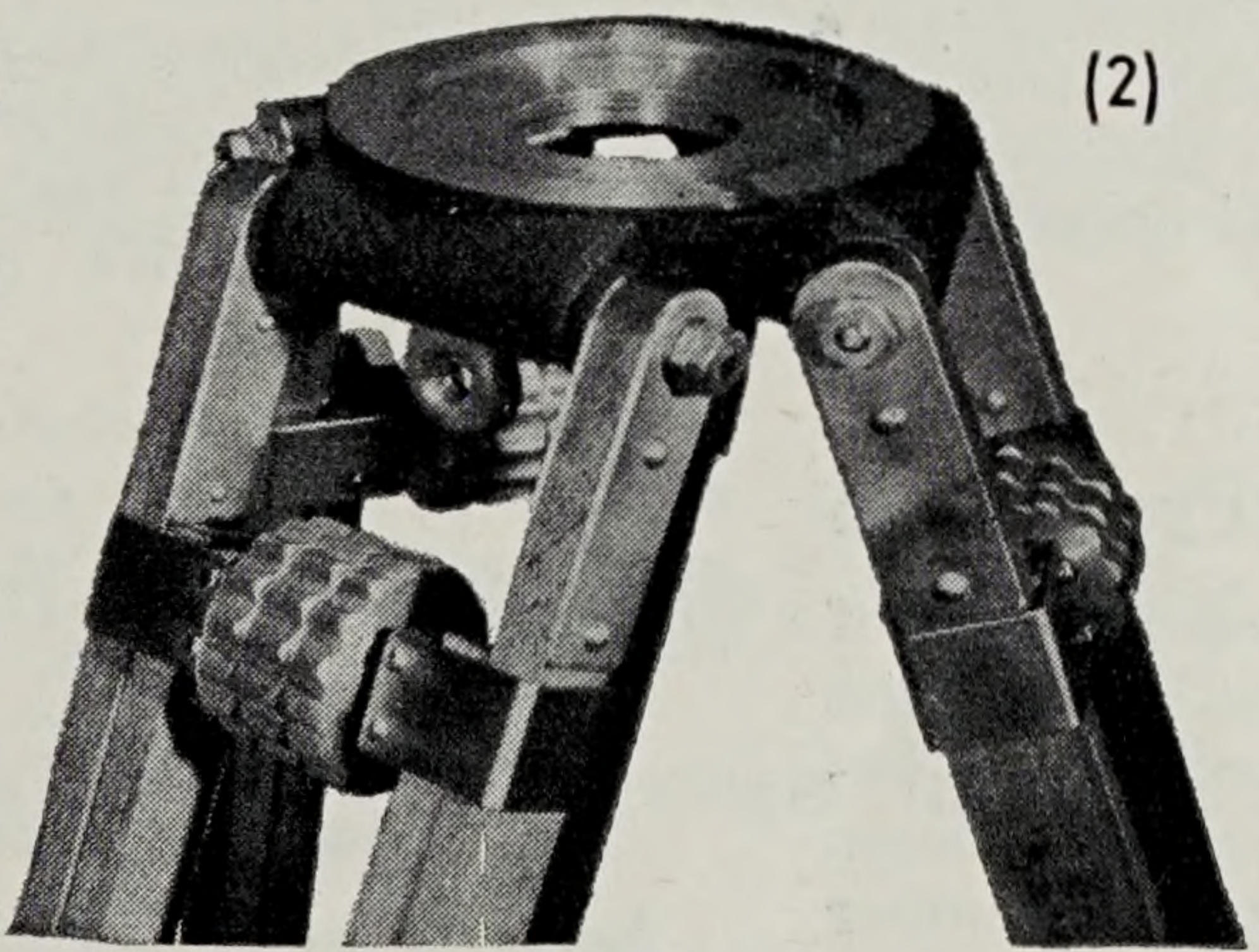


*Patent No. 2318910

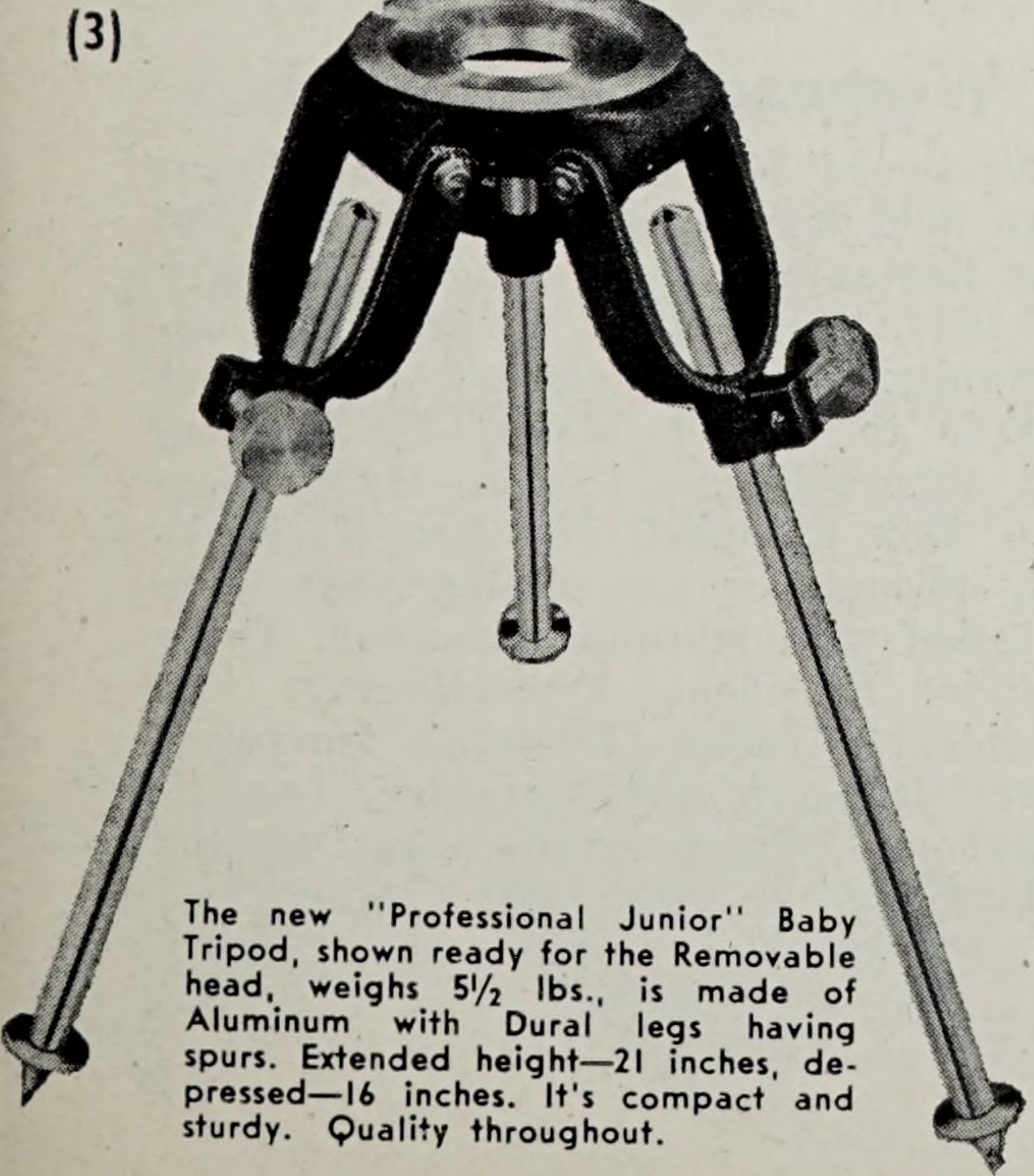
(1)



(2)

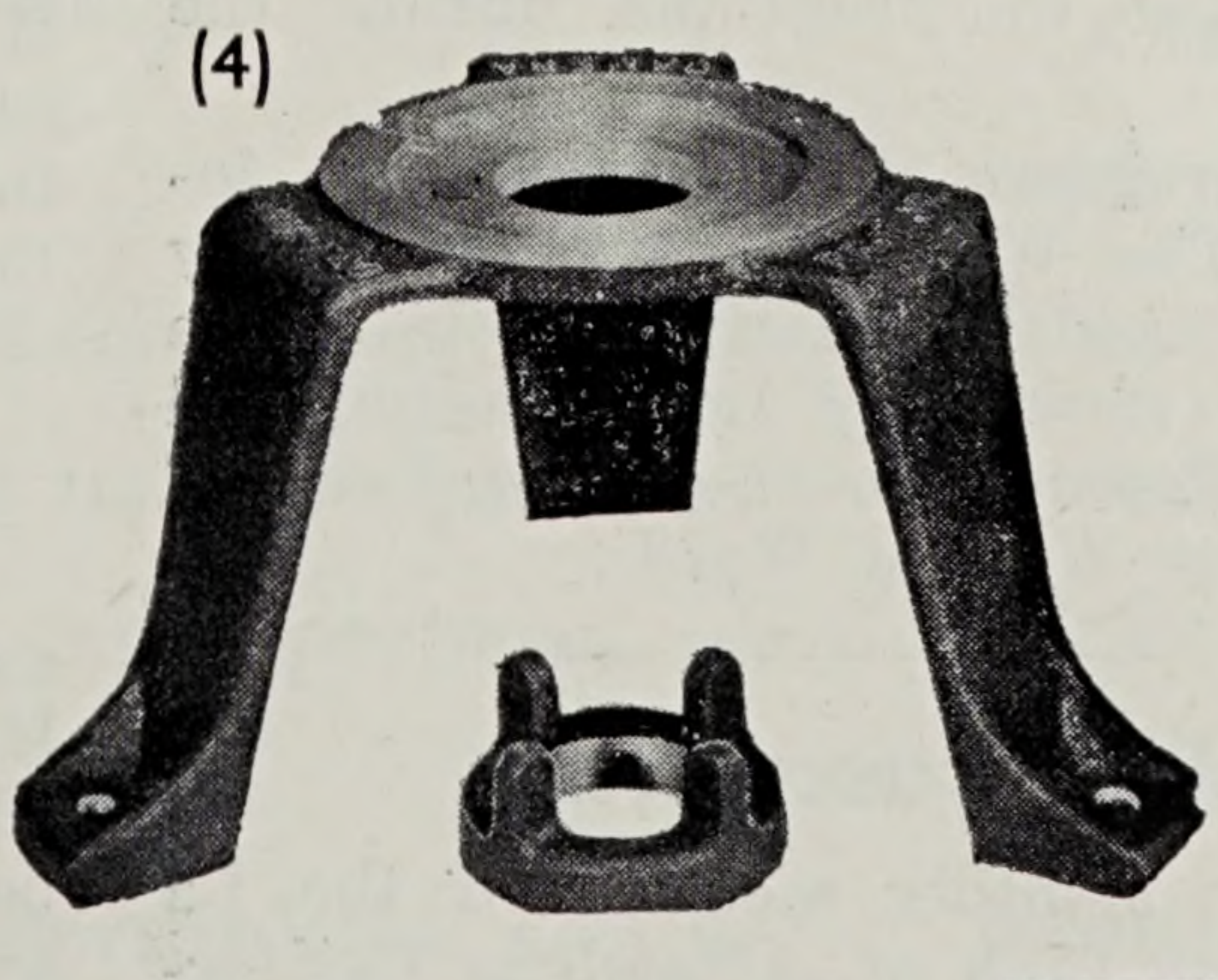


(3)



The new "Professional Junior" Baby Tripod, shown ready for the Removable head, weighs 5½ lbs., is made of Aluminum with Dural legs having spurs. Extended height—21 inches, depressed—16 inches. It's compact and sturdy. Quality throughout.

(4)



Adaptability: here are illustrated (1) the friction type removable "Professional Junior" tripod head that may be affixed to (2) the Standard Tripod Legs Base and (3) the new all-metal "Baby" tripod and (4) the "Hi-Hat" by simply fastening the finger-grip head fastening nut that is shown under it. Note the positive-locking, fluted, height-adjustment knobs and tie-down rings of the Standard Tripod Base which is standing on a Triangle.

Now Available to Camera Owners and Dealers

"Professional Junior"* Tripods, Baby Tripods, Developing Kits, "Hi-Hats" and Shiftover Alignment Gauges made by Camera Equipment Co. are used by the U. S. Navy, Army Air Bases, Signal Corps, Office of Strategic Services and other Government Agencies—also by many leading Newsreel companies and 16mm. and 35mm. motion picture producers.

FRANK C. ZUCKER

CAMERA EQUIPMENT CO.

1600 BROADWAY NEW YORK CITY

AMONG THE MOVIE CLUBS

Los Angeles Eight

President W. D. Garlock won the 1945 contest of Los Angeles 8mm. Club with his entry, "The Grass Is Green." Fred Evans' "Billy's Big Adventure" was second, and Sylvia Fairley's "She Lives Alone and Likes It" caught the nod for third. Mildred Caldwell was fourth with "The Farmer's Daughter"; John Northrup fifth with "How to Ski," and John E. Walter sixth with "El Camino Real." These six pictures were shown at eleventh annual banquet and installation of officers, held at Scully's with 125 in attendance.

Other prize winning films in the contest were shown at the January 8th meeting at the Bell & Howell Auditorium. These included—in final positions from seventh to nineteenth—"Rancho Del Sur," A. Carmona; "Travelog No. 2," B. M. Bevans; "Through the Pines," H. E. McEvers; "Underwater Pictures," John R. Boaz; "Cine Sketches," William J. Millar; "Junior Marines," Ward Dudley; "Ocean Scenes," Irwin Dietze; "Isles of the Pacific," L. B. Reed; "Grand Canyon," Max Rapp; "Black Magic," Adolph Apel; "Autumn Leaves," John R. Boaz; "High Sierra Vacation," John R. Boaz; and "Vacation," Ed. F. Stout. Garlock was awarded the Babb Achievement Trophy, and Bevans won the Horton Vacation Trophy.

Los Angeles Cinema Club

Guy Nelli captured first prize in annual film contest of the Los Angeles Cinema Club with his "Quaint Old Mexico." Second award went to Carl H. Thomsen for his "Caribou Road." Announcement of winners in the club's anual contest was made at the annual banquet held at Los Angeles Breakfast Club on January 7, 1946.

Other prize winners were: Dr. Roy E. Gerstenkorn, third, for "Tropical Ecstasy"; Mrs. Mildred Zimmerman, fourth, for "Lilac Time in Utah"; Jack Shandler, fifth, for "Autumn in Yosemite"; C. S. Morris, sixth, for "Honolulu Flight," and Jim Davis, seventh, for "Tuna Fishing."

Metropolitan Club

Judging of the novice film contest of Metropolitan Motion Picture Club, New York, has been postponed for a few months due to lack of sufficient entries at this time. Prospective entrants promise to submit pictures as soon as shooting and editing of newly-available film is completed.

January meeting was held at the Pennsylvania Hotel on January 17, 1946, and presented film program highlighted by Leo Heffernan's 16mm Kodachrome subject, "South of 36° North." February meeting will be exclusively devoted to 8mm filming.

Subscriptions Offered For Contest Prizes

With the post-war revival of contests by amateur cine clubs, chairmen of such events in the various organizations are reminded that AMERICAN CINEMATOGRAPHER will donate a year's subscription as a prize. This policy was adopted several years ago to encourage amateur contests in the clubs, and to further activities in the 8 and 16 mm. fields.

Contest chairman can automatically set the subscription as a prize on the list, and advise AMERICAN CINEMATOGRAPHER of the name and address of the winner of the award.

Metropolitan Sets Christmas Film Contest

A special Christmas film contest for members is announced by Metropolitan Motion Picture Club of New York, with films to be submitted before December 1, 1946. Winner of the $25 award will be announced at Metropolitan's next Christmas party to be held around the middle of December.

Subject must be based on the club's Christmas celebration party, or on the story, "Story of the Christmas Tree." Announcement of the contest so far in advance gives members plenty of time and opportunity to plan and shoot films for submission.

Cinema Club of San Francisco

Initial meeting of Cinema Club of San Francisco for 1946 was held at the Women's City Club on evening of January 15th, at which time the new officers outlined plans for increased member participation in programs during the year.

Film program of the evening included: "The Water Ouzel," (8mm) by Rudy Arfsten; "Springtome in Lake County," (16mm) by Leon Gagne; and "The Philippines Pearl of the Pacific," (16mm) by William Ward.

Las Casa Club

Regular monthly meeting of the La Casa Movie Club of Alhambra, California, was held at the Y. M. C. A. on January 21, 1946. Evening's film program included: "In and Around Yellowstone Park," by A. A. Maryott; W. D. Gaylock's prize winning picture, "The Grass Is Green"; "Isles of the Pacific," by L. B. Reed; and "Summer Wanderings in the High Sierras," by Graham McConomy.

Utah Cine Arts Club

Fourth Birthday and Awards banquet of Utah Cine Arts Club of Salt Lake City was held in the Rose Room of Newhouse Hotel on evening of January 16, 1946, with 200 members and guests attending.

Despite film shortages and other handicaps in filming during the past year, five members won national movie award contests; all of which were shot on kodachrome.

The winning pictures were screened at the banquet for the assemblage, and included: "America, the Beautiful" (8mm) by LeRoy Hansen; "Come Autumn," (8mm) by Al Londema; "Romance of a Sawmill," (8mm) by Miss Virginia Smith; "Worth Scouting For," (8mm) by Al Morton; and "Ski Time in the Rockies," (16mm) by Norman Shultz.

Brooklyn Amateur Cine Club

Arrangements have been completed for permanent meeting headquarters of Brooklyn Amateur Cine Club at the Hotel Bossert, where sessions have been held periodically for the past several years. At meeting on Jan. 2, plans were discussed for a future "Gala Night" of the club, and film program included a 400 foot kodachrome reel presented by Mr. Manfrin, and a circus picture by Arthur Gross.

Second January meeting on the 23rd presented program of films including "Dear Boys" by Charley Debevoise; and Walter Bergmann's prize-winner, "Squeaky."

Annual contest closed at the meeting of the 23rd, with entries of members split up between the "A" and "B" classes.

Southern Cinema Club

Seventh annual contest and banquet of the Southern Cinema Club of Southgate, Calif., was held at the Van Matre Inn at Huntington Park on January 26, 1946.

Westwood Movie Club

Westwood Movie Club of San Francisco held its annual dinner at the Del Mar Restaurant on evening of January 26, 1946. In addition to providing opportunity for presentation of contest awards to winner Walter C. Johnson, and honorable mentions to Harry Berman, Don Campbell and Leo M. Kerkhof, officers for the coming year were installed with suitable ceremony. These include: President, Fred Harvey; vice president, Walter Johnson; treasurer, Larry Duggan, and secretary, Leo M. Kerkhom. Film program wound up the evening.

There's ACTION for Your Movie Camera

NOW THAT CINÉ-KODAK FILM IS BACK

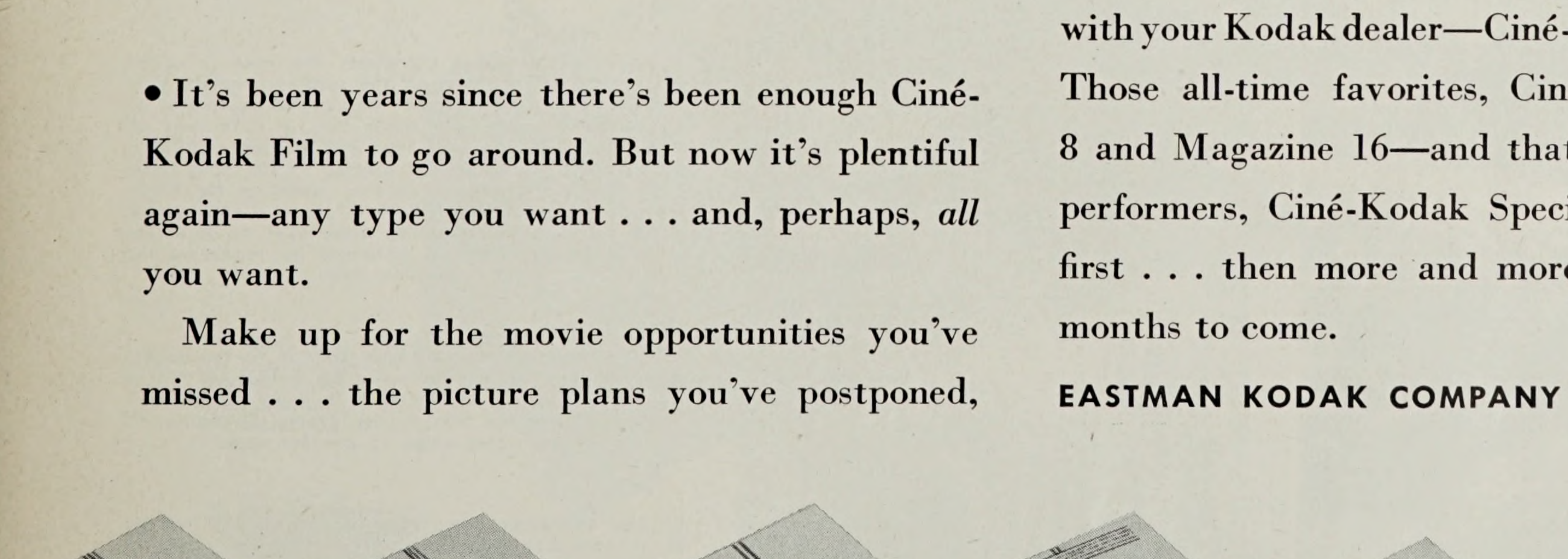
Brilliant black-and-white . . . full-color Kodachrome . . . 8mm. and 16mm. . . . in rolls and in magazines.

• It's been years since there's been enough Ciné-Kodak Film to go around. But now it's plentiful again—any type you want . . . and, perhaps, *all* you want.

Make up for the movie opportunities you've missed . . . the picture plans you've postponed, by loading up with rolls or magazines of these fine full-color or panchromatic Ciné-Kodak Films—today, as ever, *uniformly* dependable.

Ciné-Kodaks are on the way. Keep in touch with your Kodak dealer—Ciné-Kodaks are coming! Those all-time favorites, Ciné-Kodak Magazine 8 and Magazine 16—and that peer of all 16mm. performers, Ciné-Kodak Special. Only a few—at first . . . then more and more in the weeks and months to come.

EASTMAN KODAK COMPANY • Rochester 4, N. Y.


Ciné-Kodak KODACHROME 16 100
Ciné-Kodak KODACHROME A 16 100
Ciné-Kodak SUPER-X 16
Ciné-Kodak SUPER-XX 16 100
Ciné-Kodak PANCHROMATIC 8 25

Kodak

SIMPLIFIED MOVIE PROCESSING IN YOUR OWN DARKROOM

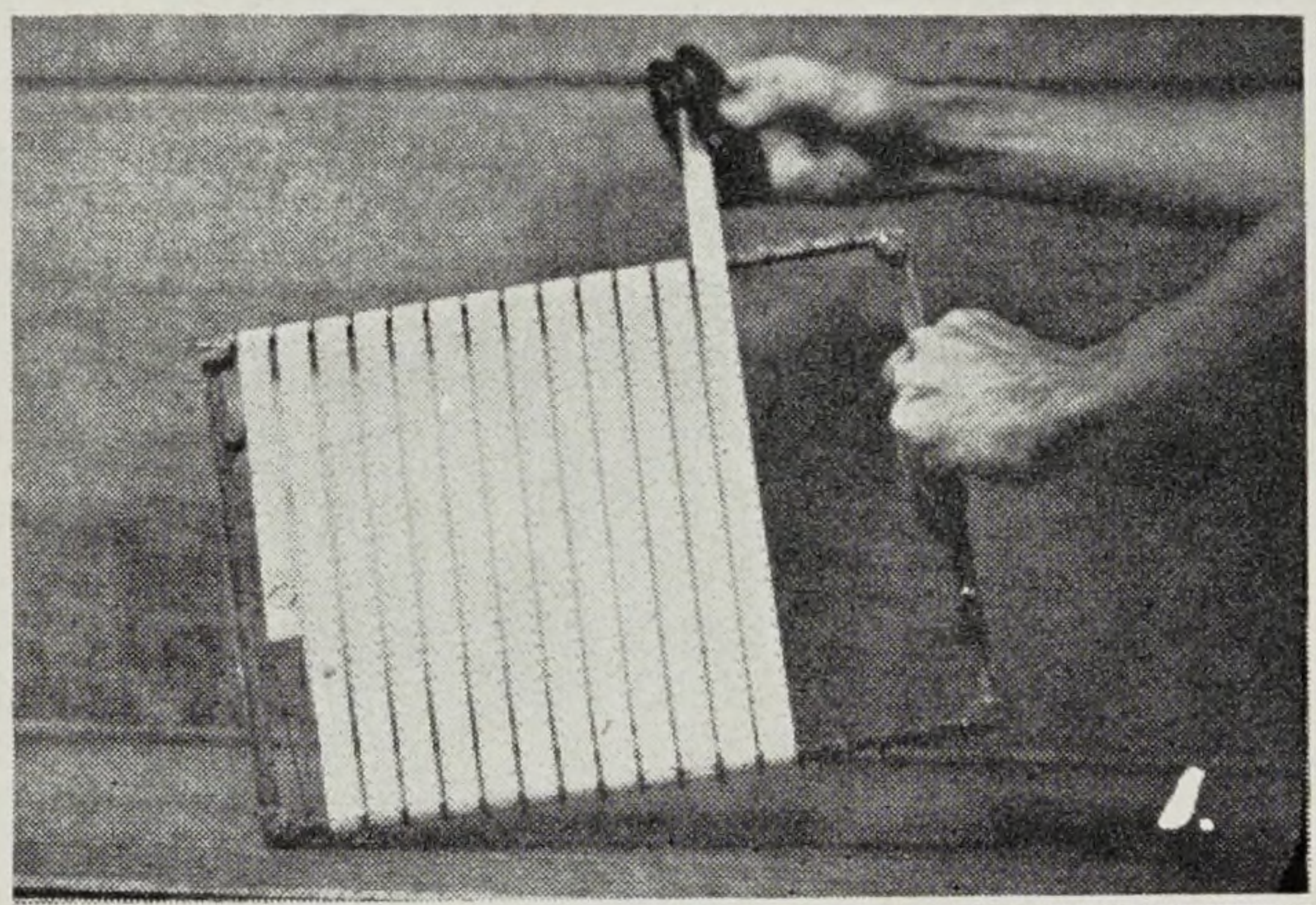
by JAMES R. OSWALD

An understanding of the principles of motion picture developing is something to be acquired with advantage by every serious minded movie maker. Such a knowledge is beneficial not only from the standpoint of knowing, in a small way, what goes on behind the scenes of the professional processing laboratory, but also in the sense that picture taking, itself, may improve through such experience. Just as the skilled craftsman in any trade is a better worker when he is well acquainted with the tools with which he works, so also should the movie maker, worthy of the name, be thoroughly familiar with the "tools" with which **he** works.

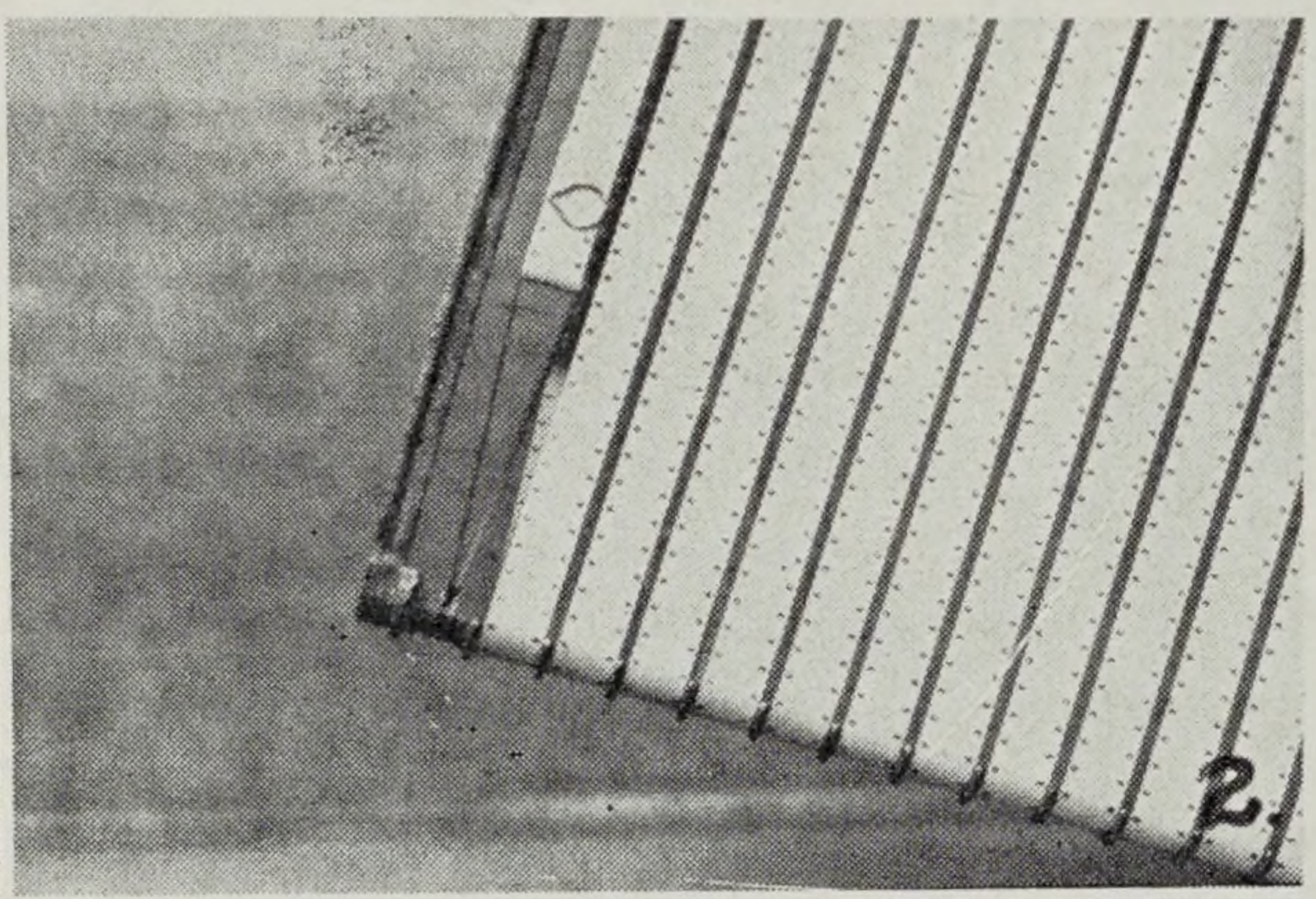
One of the best ways to learn some of the characteristics of motion picture film, and film certainly an important tool of the cinematographer, is through practical experience in one's own darkroom. With the aid of simple equipment, the developing process is carried on with almost the same ease as that enjoyed in handling still films, and with surprising results. For the person who likes to tinker with tools, such apparatus as is necessary may be constructed right at home, or, if preferred, may be purchased already assembled.

While it is possible to home-process practically any type of movie film, after one has advanced beyond the more elementary requirements, it is rather foolish, and certainly inadvisable to handle film at home that will be processed by the maker free of charge. There are,

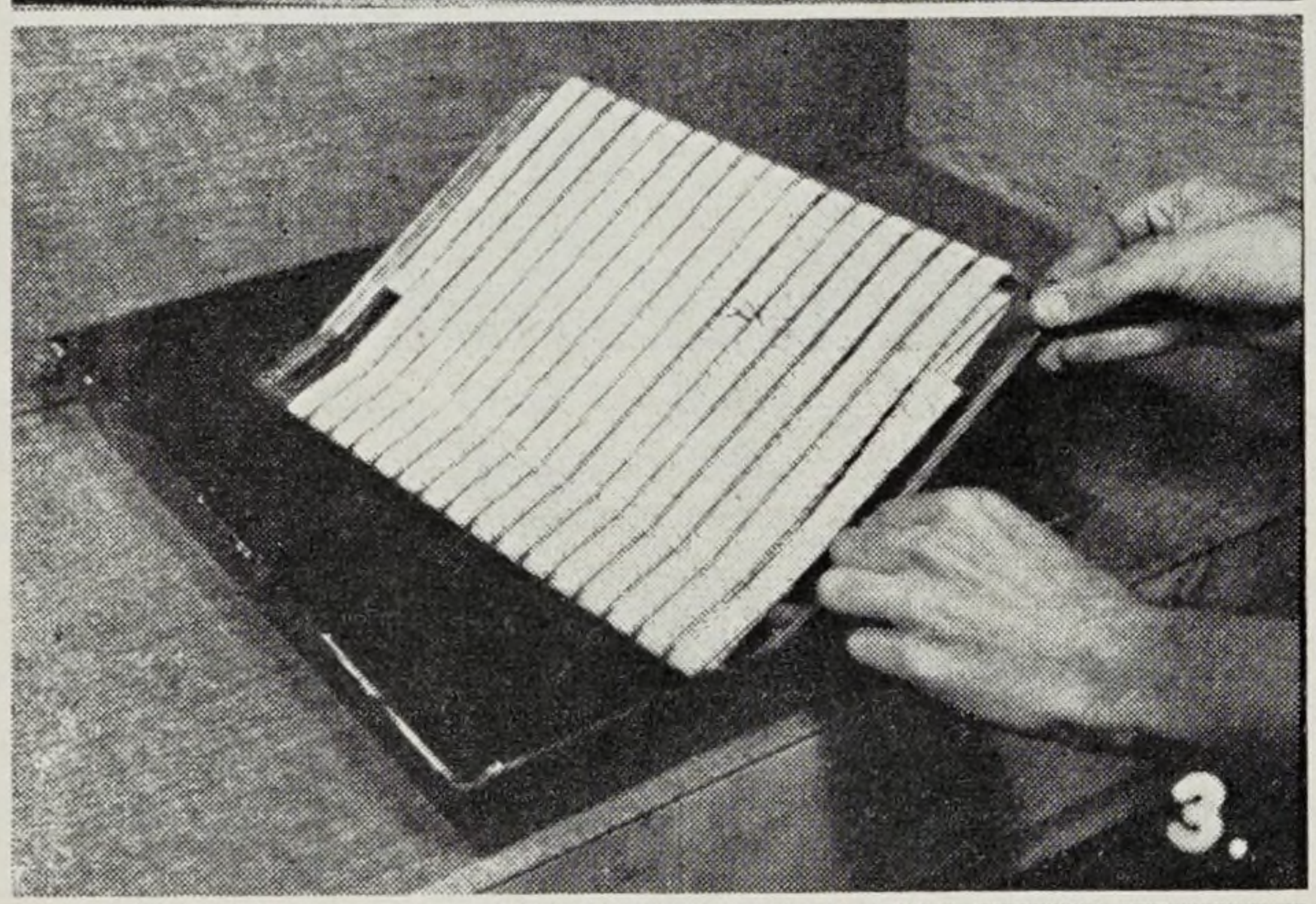
(Continued on Page 69)



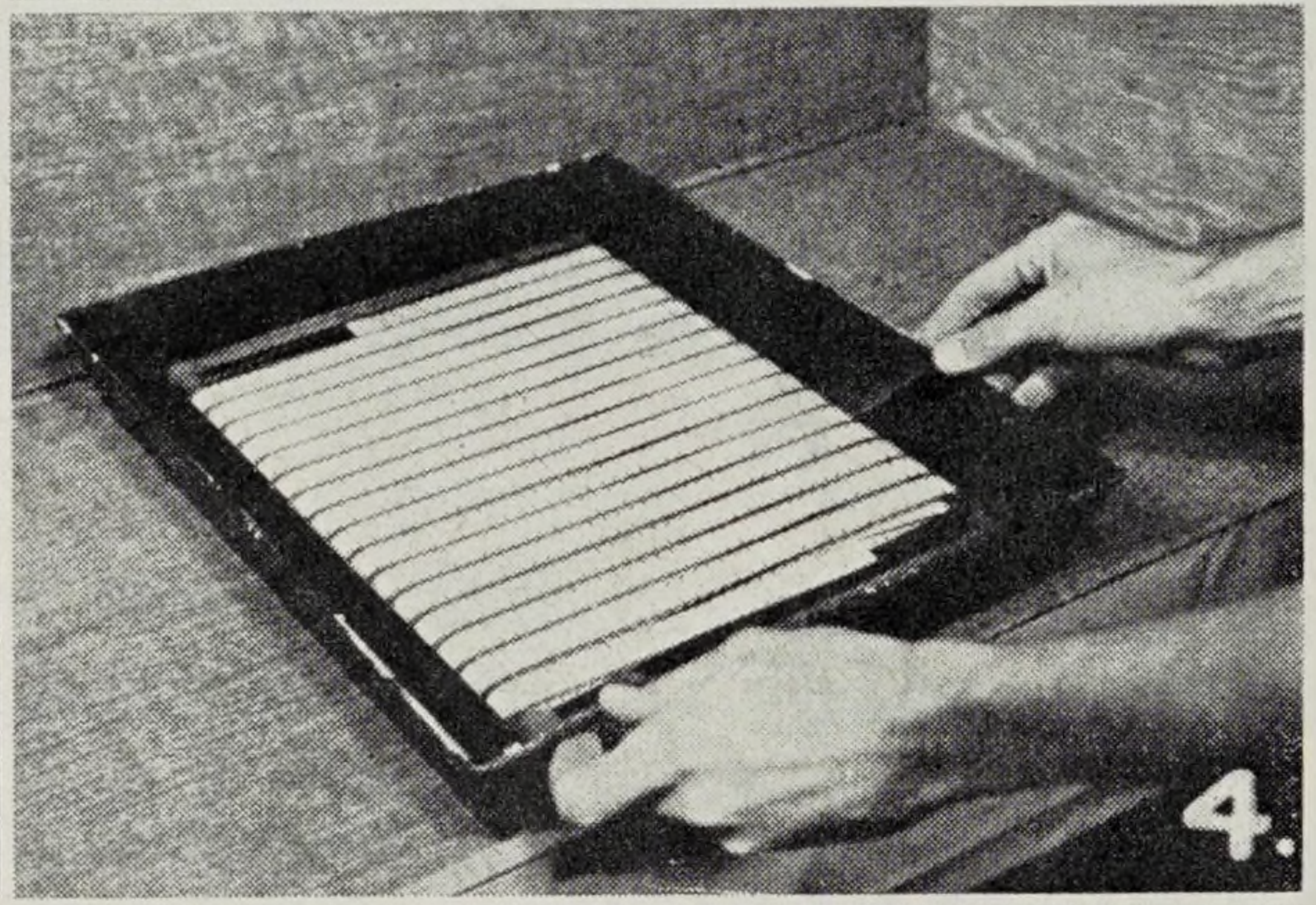
1. The film is unspooled in the darkroom onto the developing rack. The rack should be so constructed as to fit a conventional size developing tray, such as 11x14 inch, requiring a minimum of solution. A rack similar to that illustrated accommodates approximately 25 feet of film at a time, uses about a gallon of solution.



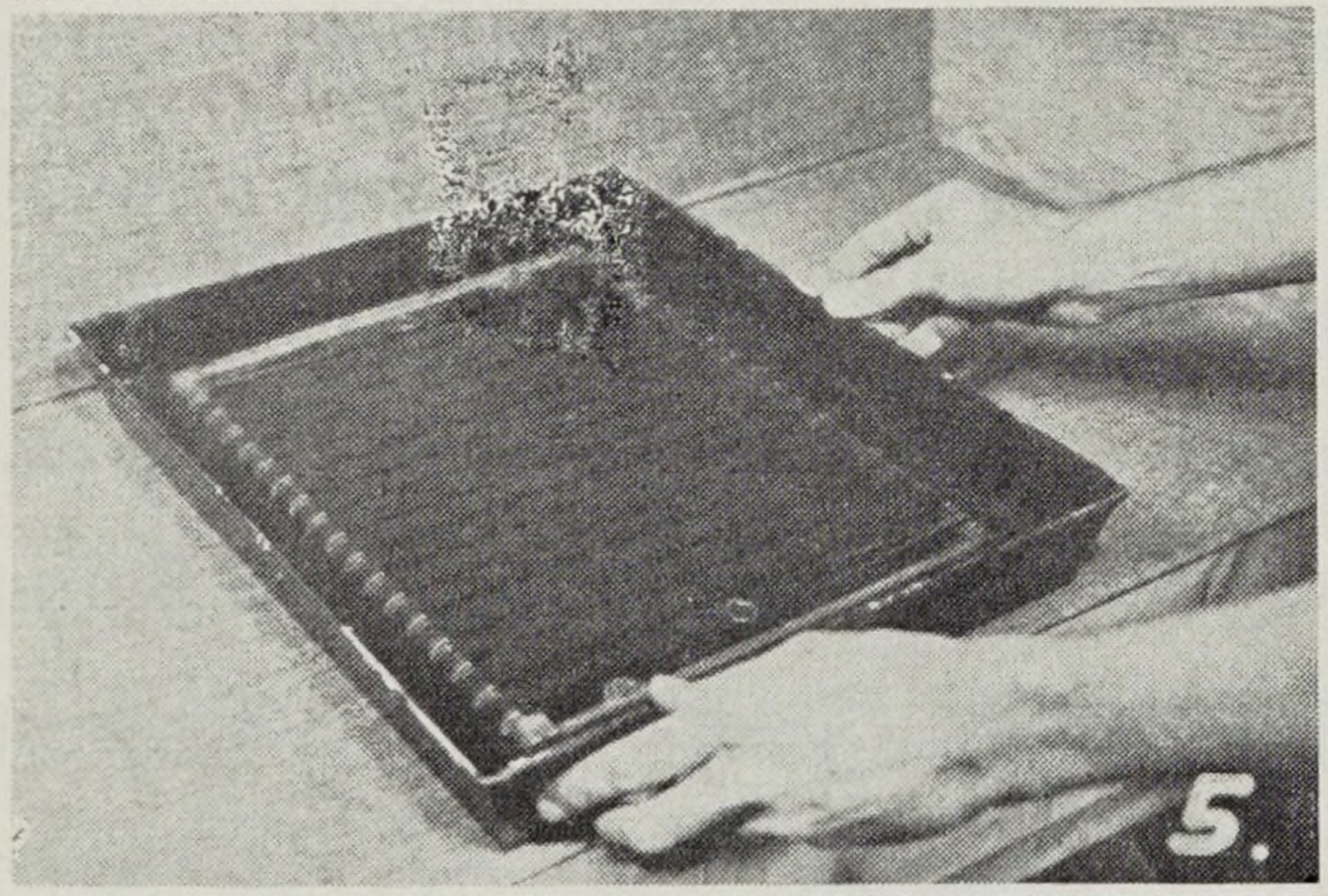
2. Closeup showing method of attaching film to rack by means of rubber band and paper clip. Rubber band allows for any expansion or contraction of the film during the different stages of the process. Note guides which prevent film loops from overlapping. No part of the picture surface itself actually touches the rack, since edges of film rest on surface that is slightly raised from that underneath the picture area.



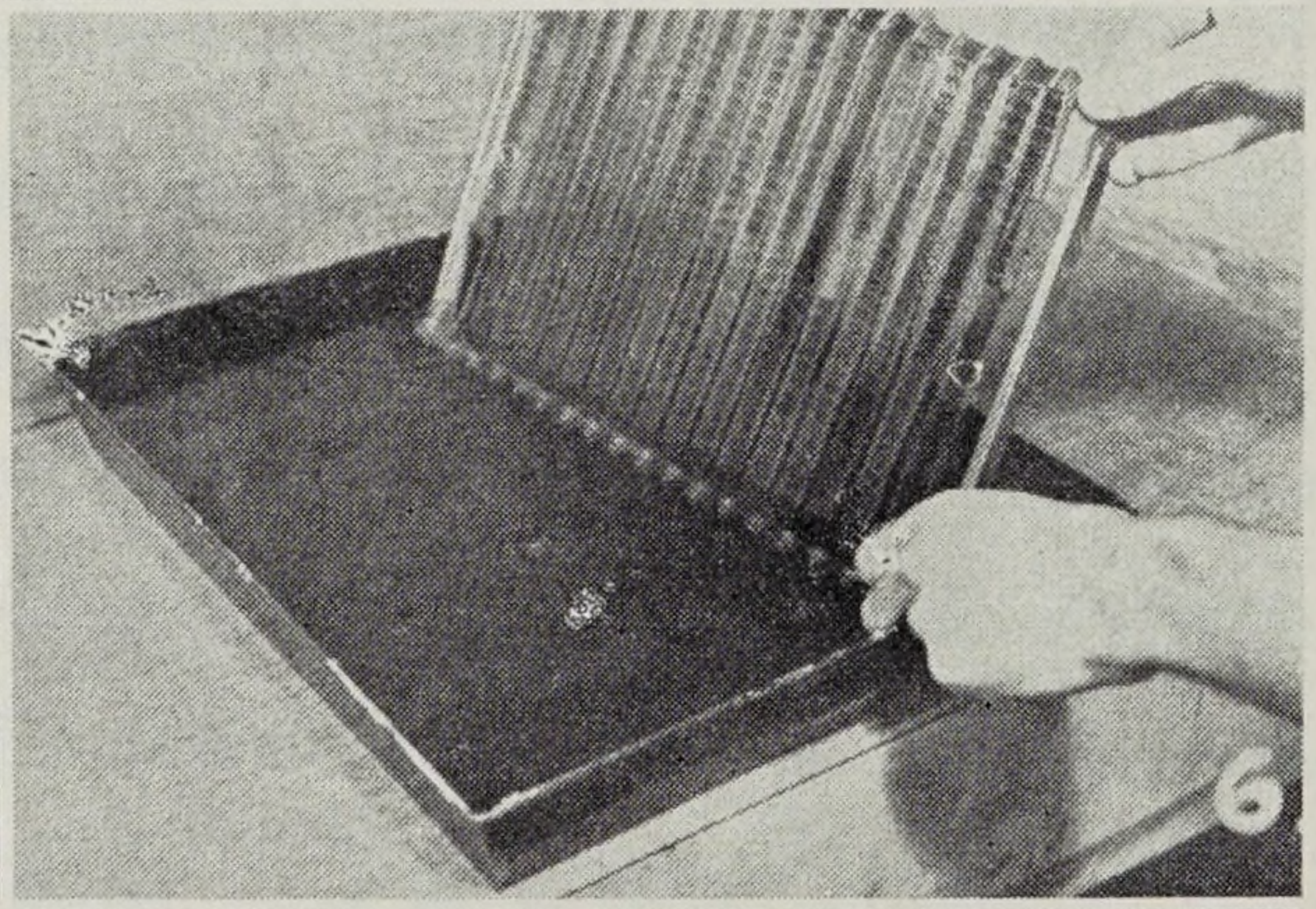
3. Film is immersed into the developing agent. Ordinary D-72, D-76 or its equivalent, serves as the developer. For extreme contrast, such as in title work, D-11 is recommended.



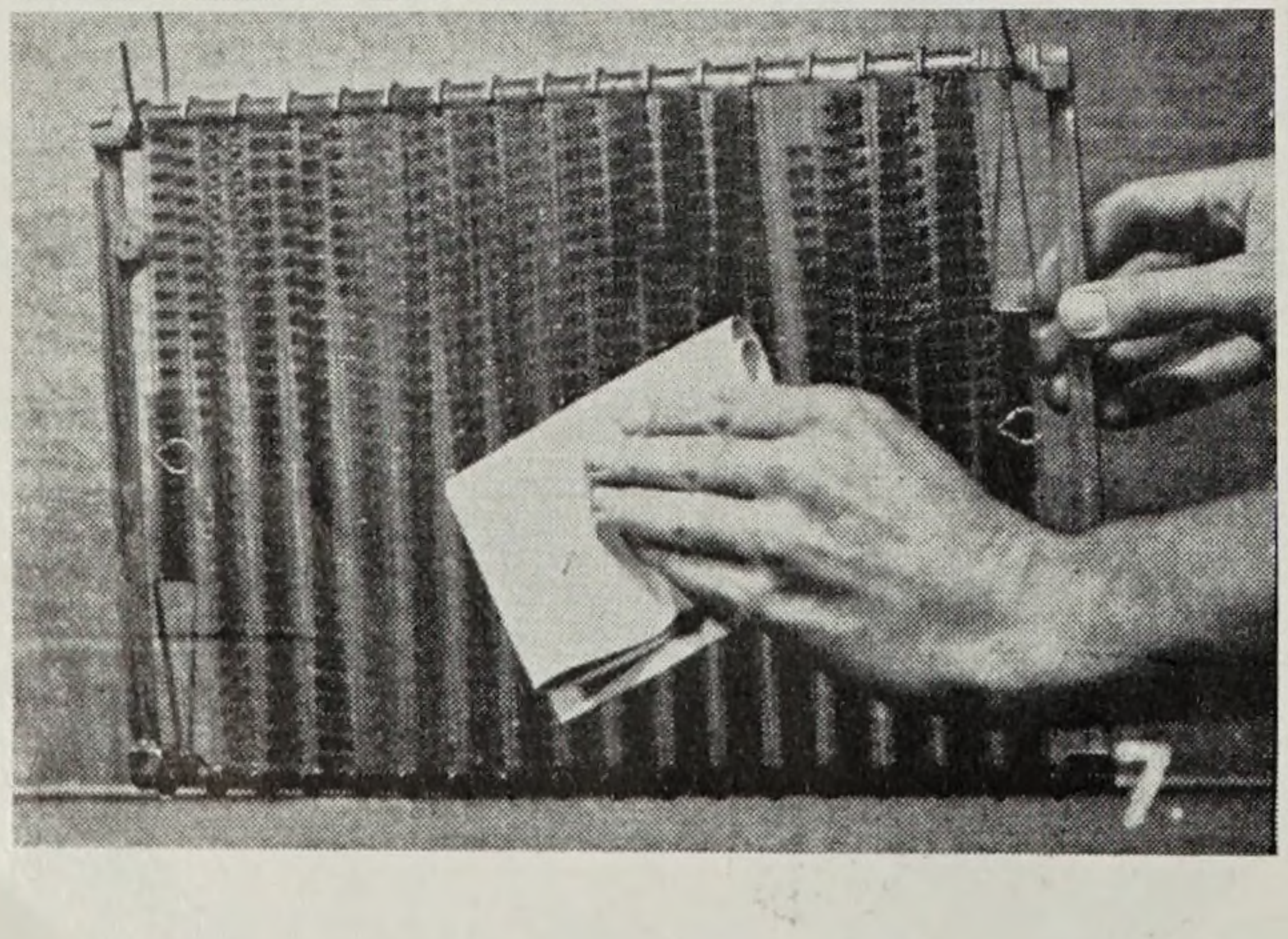
4. As in the case of still films, the solution is constantly agitated, by rocking. Occasionally, the rack is turned over in the tray, during the process.



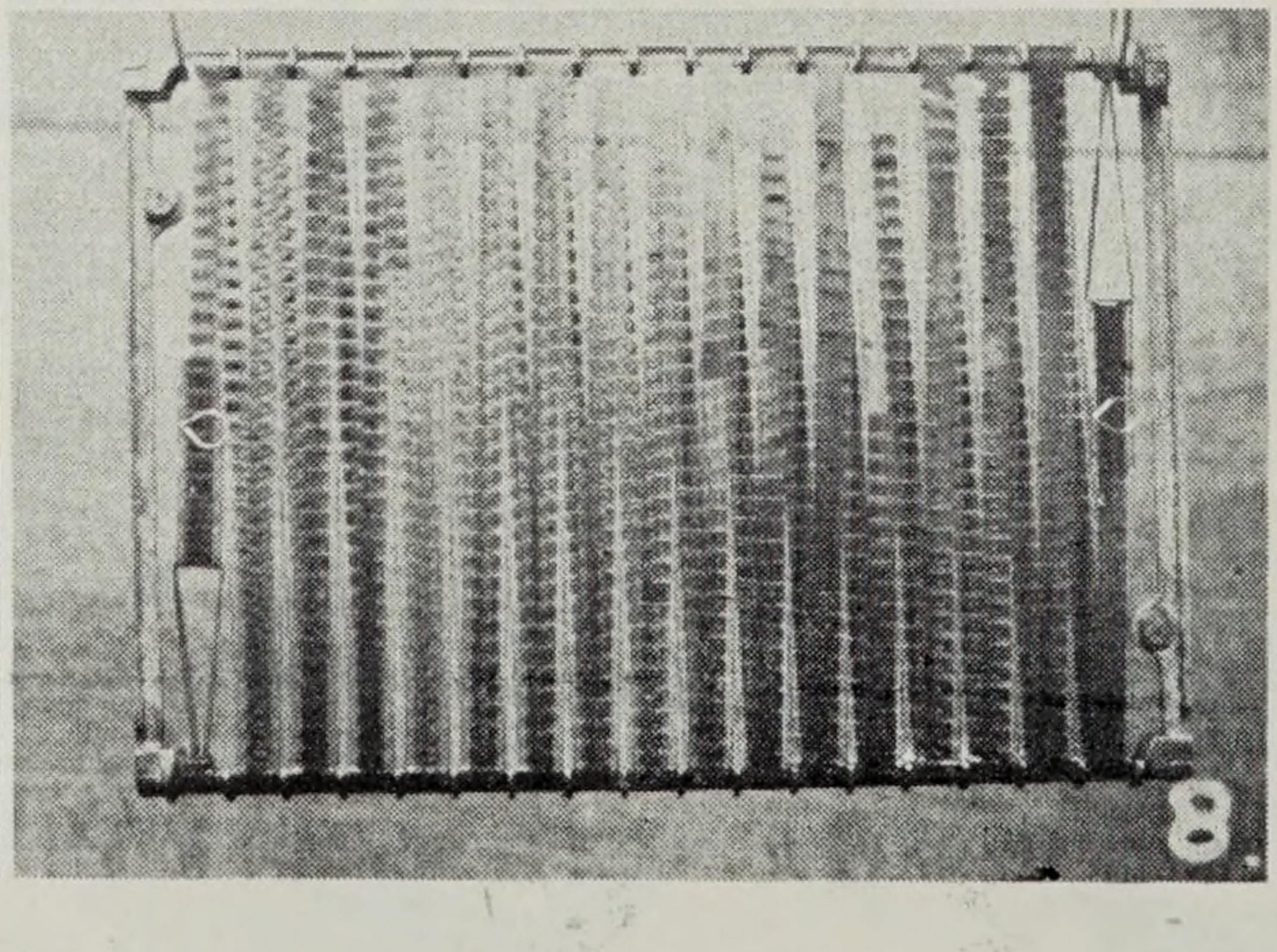
5. After a time, the film begins to darken, like this. Development is carried on to the length of time specified by the manufacturer of the particular developer being used.



6. With development complete, the rack is raised from the tray, draining off the surplus solution. Film is then placed into another tray containing water or a short-stop, and from there into a third tray of fixing a solution or acid hypo and hardener. If film is to be reversed, instead of placing in the fiing bath, it is first put through a bleach, removing the negative image, and then "flashed" to a light source, which exposes the remaining silver salts, to form the positive image, which is obtained by repeating the developing step.

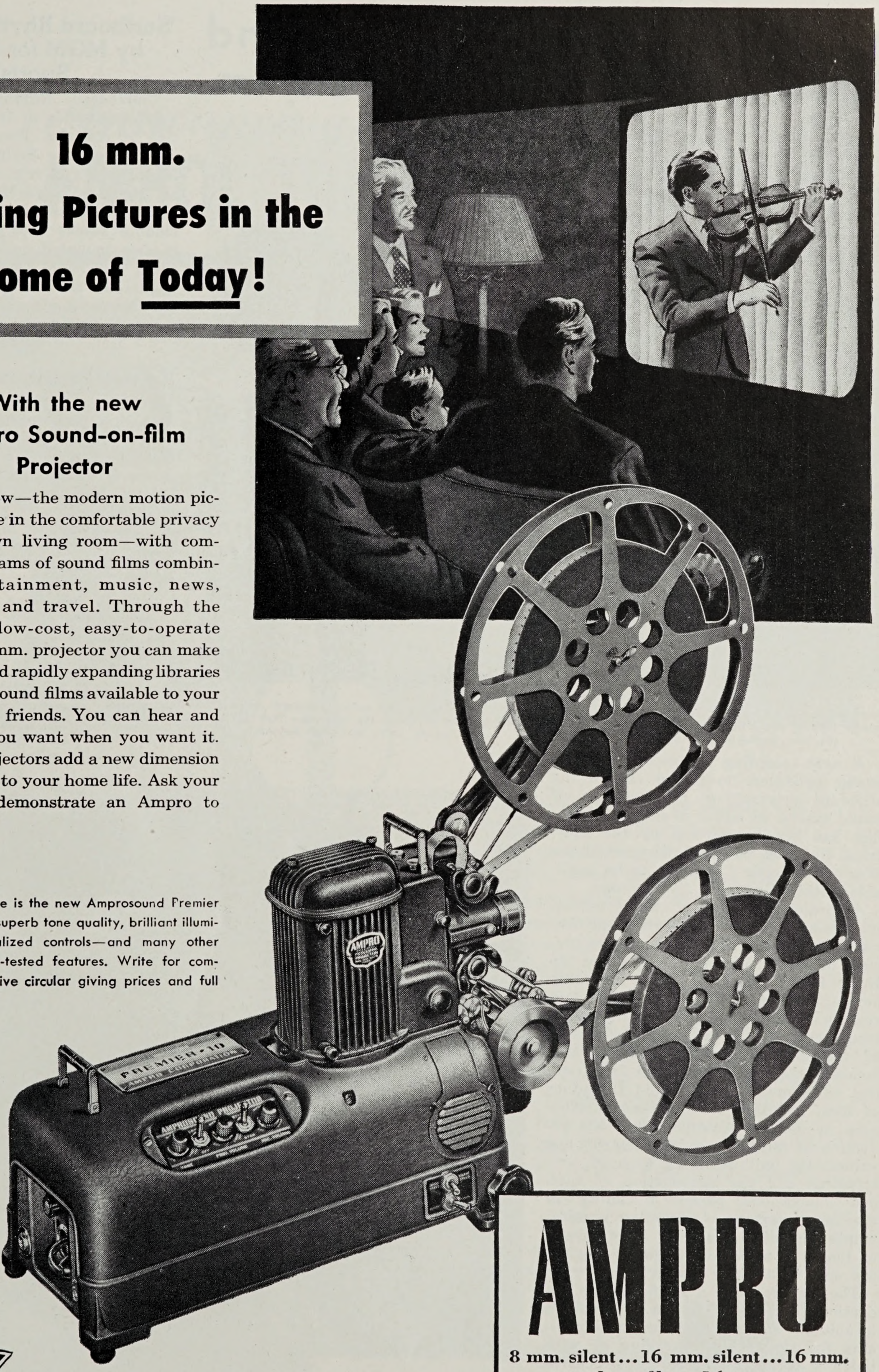


7. In either process, the final step is to thoroughly wash the film in running water to remove all traces of hypo, after which the rack is hung up on wire hooks to allow the film to dry evenly. Sponging off excess water helps to prevent spots.



8. The operation complete, the film is left to dry in a room free from dust. When thoroughly dry, it is spooled onto a reel, ready for projection.

16 mm.
Talking Pictures in the Home of Today!



With the new Ampro Sound-on-film Projector

It's here now—the modern motion picture theatre in the comfortable privacy of your own living room—with complete programs of sound films combining entertainment, music, news, education and travel. Through the compact, low-cost, easy-to-operate Ampro 16 mm. projector you can make the large and rapidly expanding libraries of 16 mm. sound films available to your family and friends. You can hear and see what you want when you want it. Ampro projectors add a new dimension of pleasure to your home life. Ask your dealer to demonstrate an Ampro to you *today!*

Illustrated here is the new Amprosound Premier 10—offering superb tone quality, brilliant illumination, centralized controls—and many other exclusive war-tested features. Write for complete descriptive circular giving prices and full details.

The Army-Navy "E" has been awarded to Ampro for excellence in the production of 16 mm. motion picture projectors.

ARMY E NAVY

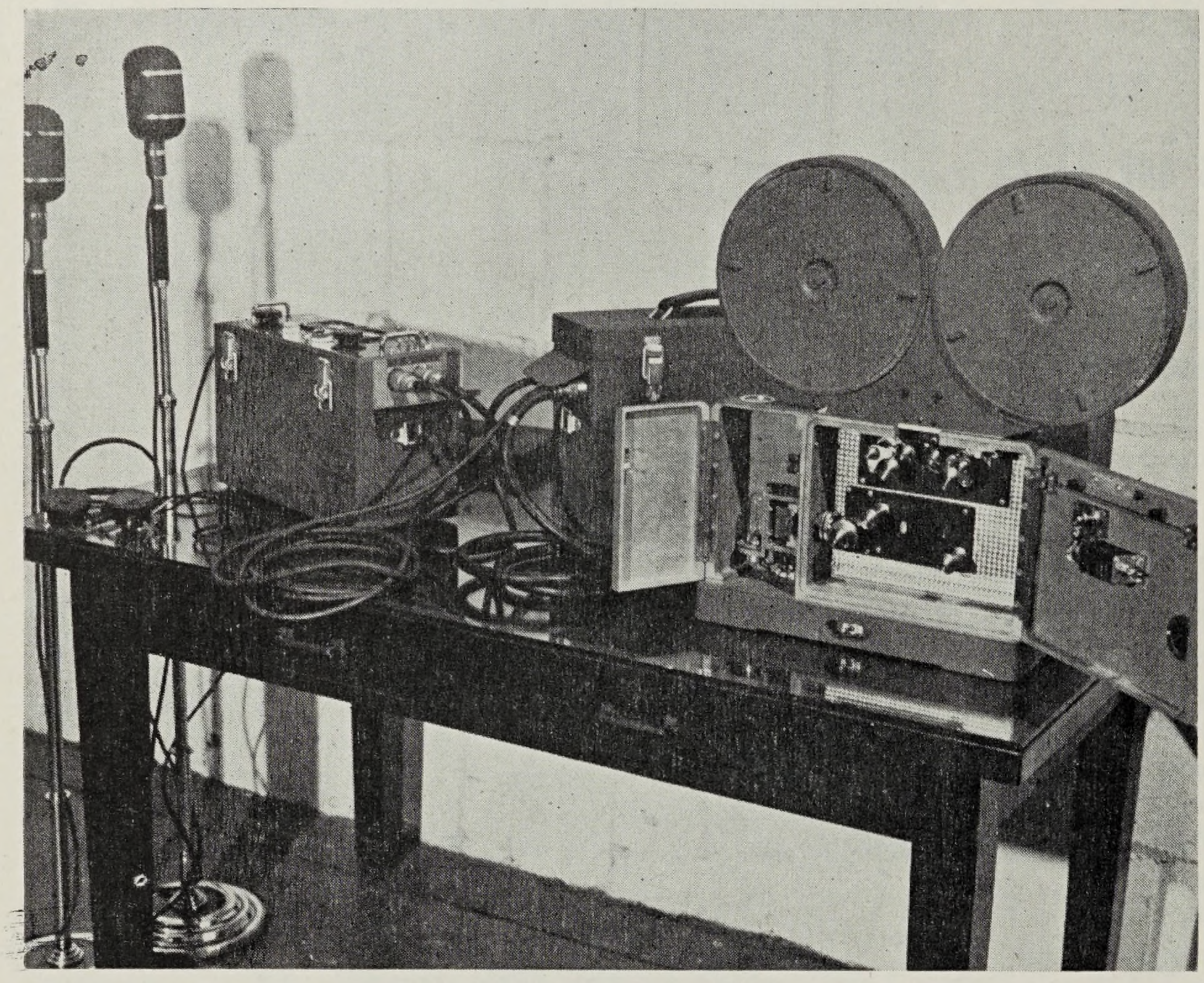
AMPRO CORPORATION • CHICAGO 18

A General Precision Equipment Corporation Subsidiary

AMPRO

8 mm. silent... 16 mm. silent... 16 mm. sound-on-film... 16 mm. arc projectors... accessories

New Western Electric Sound Recorder For 16mm. and 35mm.



New Western Electric sound recording system, which will enable producers to record standard original or release type of sound tracks on either 35 mm. or 16 mm. film. Shown above on the table are (left to right) the new portable Amplifier-Noise Reduction Unit, Power Supply Unit, and the Recorder.

A new recording system, which will enable producers to record any of the standard original or release type of sound tracks on either 35mm. or 16mm. film has been announced by the Electrical Research Products Division of the Western Electric Company, to be available within the next few months.

According to technical papers recently presented before the 58th Semi-Annual Technical Conference of the Society of Motion Picture Engineers at the Hotel Pennsylvania, the new recording device, smaller in size and weight, represents a marked departure in design from equipment in use today. Features of the new design are simplicity of mechanical parts and freedom from critical adjustments, more rapid threading of film, adaptability to either variable area or density recording, and the reduction of flutter to extraordinarily low values. Its unit assembly type of construction and the introduction of various innovations permit flexibility in meeting a variety of recording requirements including changing from 35mm. to 16mm. in a matter of minutes by the use only of a screw driver.

The new portable Amplifier-Noise Reduction Unit with a Power Supply Unit is suitable for use with newsreel cameras for single film recording or with the new recorder where an inexpensive double film system is required. Two microphone input positions are provided, and noise reduction and volume limiting are included.

"Surfboard Rhythm" Acquired by MGM for Pete Smith Sportshort

"Surfboard Rhythm," produced by Telefilm Studios in 16 mm. under direction of Charles Trego, has been purchased by Pete Smith and will be released in his 35 mm. sports short series at Metro-Goldwyn-Mayer. The film is replete with unusual camera angles including scenes shot from waterproofed camera mounted on a surfboard, which could not have been taken with more ponderous 35 mm. equipment, Telefilm maintains. Surfboard champions were featured in the short.

Ampro Distributor for Canada

Telephoto Industries Limited of Toronto has been formed to handle distribution and servicing of Ampro 16 mm. motion picture equipment and accessories in Canada and Newfoundland.

Paul Nathanson, head of the Canadian Odeon theatre circuit and operator of film exchanges in the Dominion, organized the new company. C. Ray Harnett, Canadian visual education expert, has been appointed general manager of Telephoto Industries.

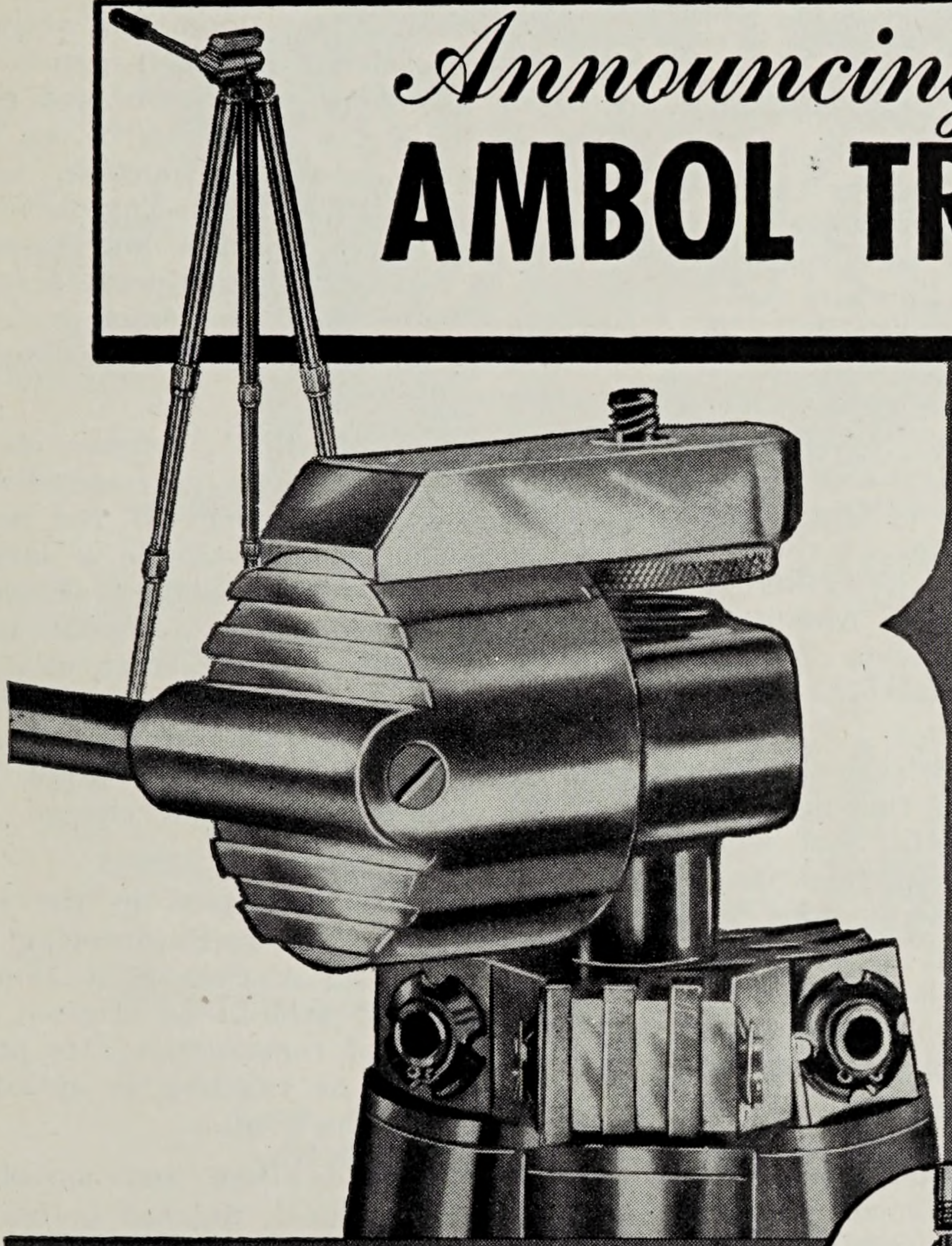
Acquisition of the Ampro line of 16 mm. sound projectors and equipment indicates future plans of Nathanson to expand his theatre operations throughout Canada with establishment of theatres in smaller communities where regulation 35 mm. theatres have not been operating.

THESE CAMERAS MAKE 16 MM. HISTORY—Here are cameras, specially adapted with motor drive and special lenses and mounts, designed and built by technicians of Telefilm Studios of Hollywood for purpose of covering horse races at Hollywood Park and Santa Anita tracks in California. Head-on films are shot of races from start to finish from six towers around the course.

Announcing...

AMBOL TRU-PAN TRIPOD

BY AMERICAN BOLEX COMPANY*



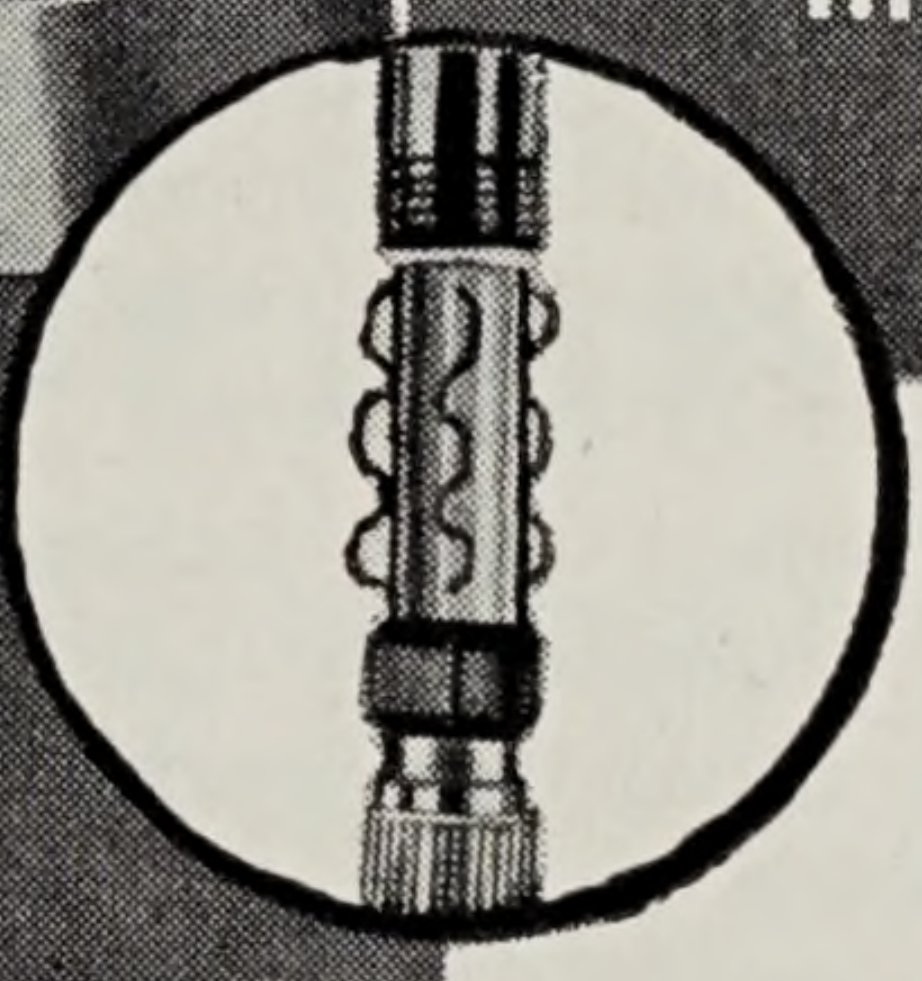
PRECISION ENGINEERED!

A SMOOTH WORKING FRICTION HEAD that will not loosen up or wear out

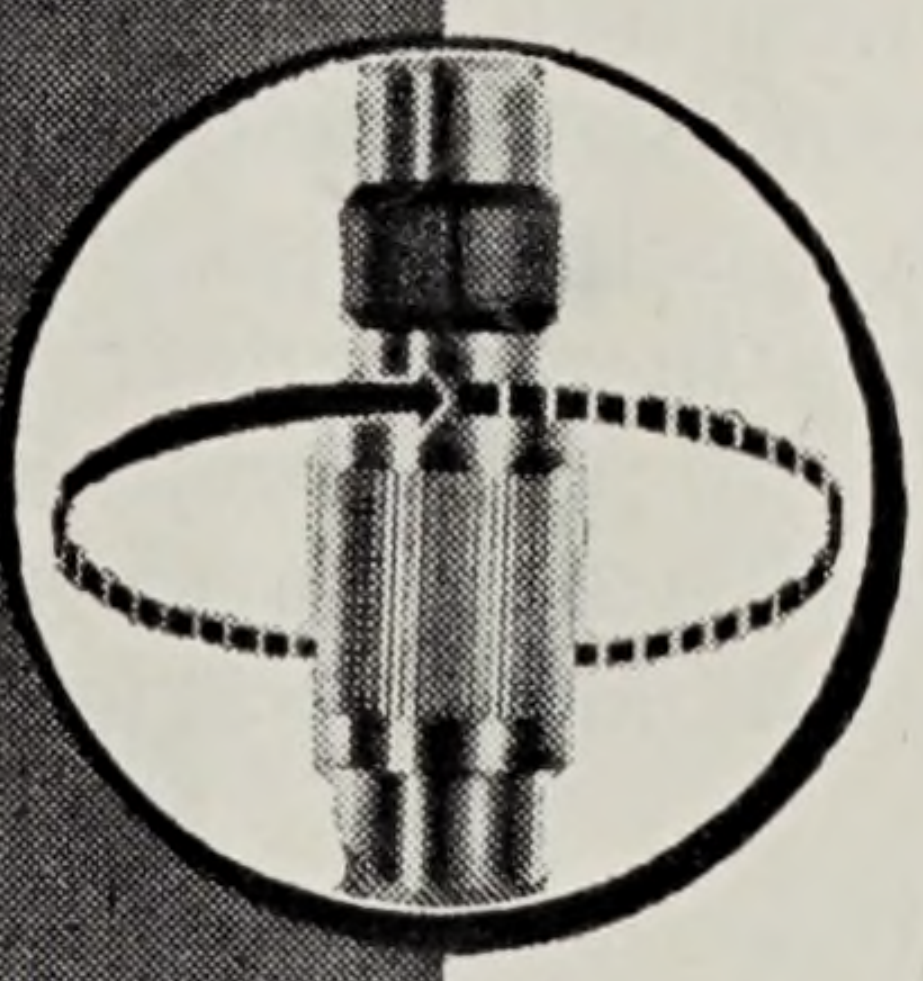
WEIGHS ONLY FIVE POUNDS—absolutely rock steady

REVOLUTIONARY IN TRIPOD DESIGN—quarter turn of grip locks firmly or unlocks easily pan-tilt head

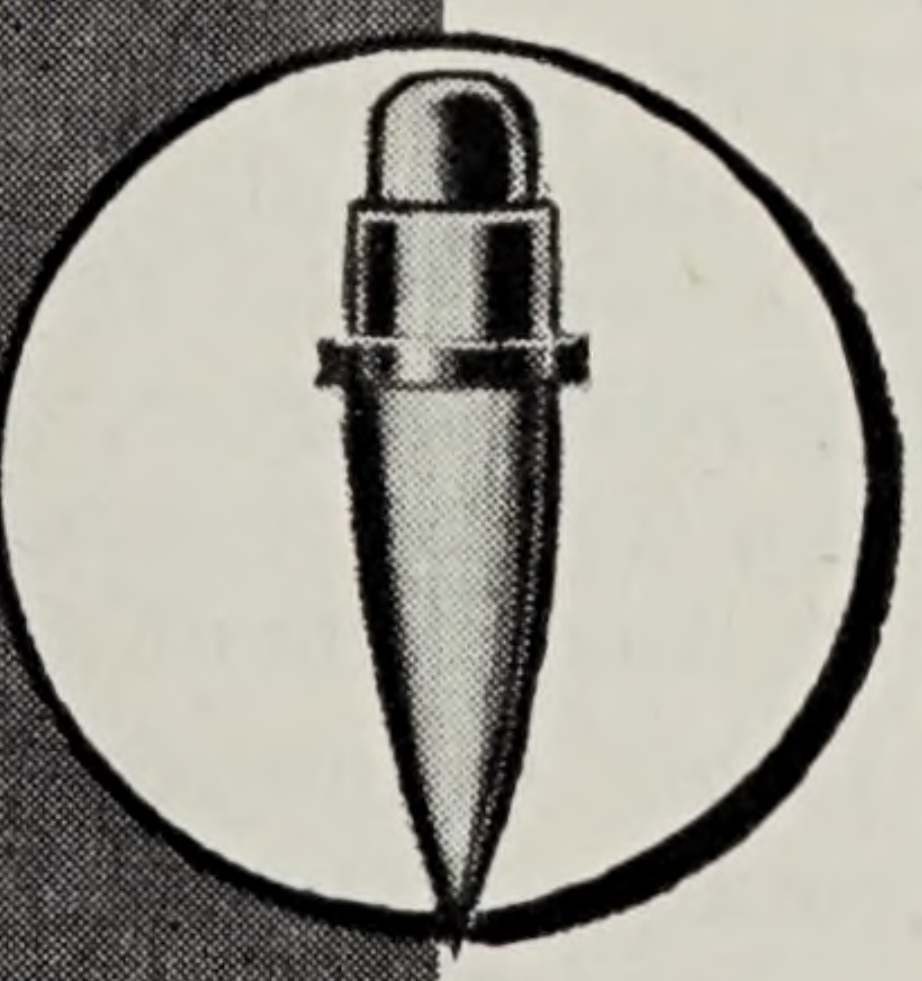
STRENGTH ENOUGH TO SUPPORT 200 LBS. telescopic aluminum legs designed so there is no "play" at joints whatsoever



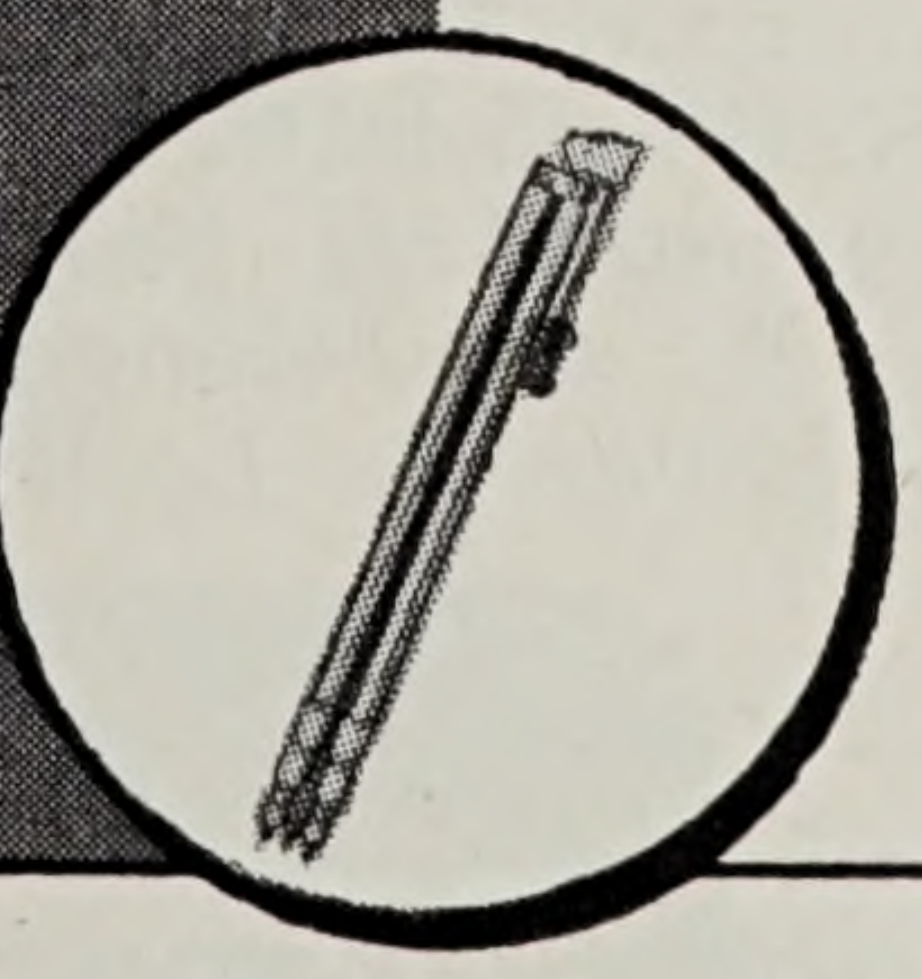
SPRINGS AND SPLIT BUSHING in sliding leg members prevents wobble and assures smooth, precise operation



LARGE, MILLED LOCKING LEG GRIPS permit certain and instant lock with grip that cannot be pulled apart



REVERSIBLE STEEL POINT OR RUBBER FEET holds stand firmly on any surface



FOLDS INTO SMALL, EASILY PORTABLE PACKAGE so light this tripod will be with you when you want it . . . you will carry the AMBOL because of its lightness and because you will be proud of it

The AMBOL TRU-PAN TRIPOD is new in design and precise in operation. It is fully machined and precision built. Only machining can give the precision required for smooth operation in a pan-tilt head. There is not one die-cast part in the AMBOL TRU-PAN. Its smooth operation is amazing. One inspection at your Dealer's will make you the owner of one of these, the finest low or medium priced tripods ever made.

Operates efficiently with all cameras, "still" or movie, weighing from a few ounces to many pounds. No camera too light and none too heavy for the AMBOL TRU-PAN. Special attachment for press cameras. Fully guaranteed. Price, $43.10 including excise tax. Ask your Dealer to demonstrate. If not yet in his stock when you call, please write us for literature and give us the Dealer's name.

*

American Bolex Company 521 FIFTH AVENUE • NEW YORK 17, N. Y.

Report of SMPE Color Committee

(Continued from Page 48)

developed by RCA and will be manufactured in quantities as soon as there is a commercial demand. This tube will be known as the 1P37. It is to be expected that satisfactory tubes will be made available by other manufacturers.

Tubes of this new type appear to have some advantages over the Ag-O-Cs tube. For example, the sensitivity at shorter wavelengths makes possible a marked increase in resolution of the slit image. This, and related factors, are described in detail in the several papers which are scheduled for presentation later in the Conference. From the comments of those who have experimented with the new tubes, it appears that this new unit is a remarkably good tool and one which promises to have a widespread use. In fact, it is very much in order for this industry to consider the proposition to replace the present infrared sensitive phototubes in projectors with tubes of this new type. The merits of the new unit can be summed up by saying that had it been developed prior to the Ag-O-Cs tube there would not now be any thought of replacing the former with the latter; and this statement can be made without considering the new potentialities of the new tube for color sound tracks.

The chief merit of the Ag-O-Cs tube, then, is reduced to the fact that it is already in widespread use. But, for sound reproduction, the threat of obsolescence hangs over it.

The results made possible by the use of tubes of this new type with sound tracks on color film will be the subject of additional papers at this and subsequent Conferences (of the SMPE). The way in which tracks of ferric-ferrocyanide and of silver sulphide react with the new tube also needs study. In this connection it should be noted that ferric-ferrocyanide is not nearly so transparent in the range of sensitivity of the new tubes as are the great majority of dyes in the near infrared region. And it appears from preliminary tests that the iron-tone track can be adapted to the new tube.

The Color Committee wishes to stress the fact that in tubes of this new type we have a new and useful tool which opens up possibilities of simplification of processing of sound tracks on color film.

Considering the matter of prospective future replacement, the Committee wishes to stress the matter of interchangeability and standardization, particularly in the 35 mm. field. There are apparently two different characteristic constructions, and it is not clear from published data whether or not there is a variation in spectral sensitivity between the two constructions.

If, as, and when new tubes of this description are adopted by the industry, such a change must be world-wide and accomplished with the minimum of confusion. The Committee recommends that the Society communicate with the British Kinematograph Society and other similar organizations in all countries, to the end that a norm of performance for such tubes be set up. This norm should apply to both the optical and electrical characteristics.

The Committee believes that in the first instance this prospective change-over need be considered only for 35 mm. film. The change-over in the 16 mm. field is a rather different matter, and with regard to that the Committee has no recommendations at the present time.

The SMPE Color Committee making the above informative report comprised: J. A. Ball, chairman; M. R. Boyer, G. A. Chambers, L. E. Clark, R. O. Drew, R. M. Evans, J. L. Forrest, J. G. Frayne, L. T. Goldsmith, A. M. Gundelfinger, A. C. Hardy, W. C. Miller, L. L. Ryder and J. G. White.

PRECISION LENSES
For Immediate Delivery

▲

Bausch & Lomb Baltar F 2.3 50mm.
Bausch & Lomb Baltar F 2.3 75mm.
Goerz Apogar F 2.3 35mm.
Seminat F 3.5 150mm.

If desired can be furnished coated or mounted to your specifications.

▼

NATIONAL
Cine Laboratories
20 West 22nd Street
NEW YORK CITY

Ansco Factory Expanding

Ansco has embarked on a construction project to greatly increase factory capacity for the manufacture of raw film and other photographic products. Building program under way provides for outlay of more than $10,000,000, with the present factory at Binghamton, New York.

16mm. Accessories by Micro-Engineering

Rapid expansion of 16mm film activities in professional fields to generate need for precision instruments and accessories similar to apparatus in use in the regulation studio production, has dictated formation of Micro-Engineering Corp. Latter plans design and manufacture of various precision-made accessories and equipment for 16mm professional use, especially in laboratory processing and editing.

Len H. Roos, A. S. C., veteran cinematographer, film war correspondent, and producer, is president of the new company, which has available a large plant equipped with nearly $1,000,000 worth of precision machine tools and machinery for the manufacture of the 16mm accessories. Ben Levin, Hollywood attorney recently returned from the AAF, is vice president, while B. Weldon Hancock will take charge of sales and distribution.

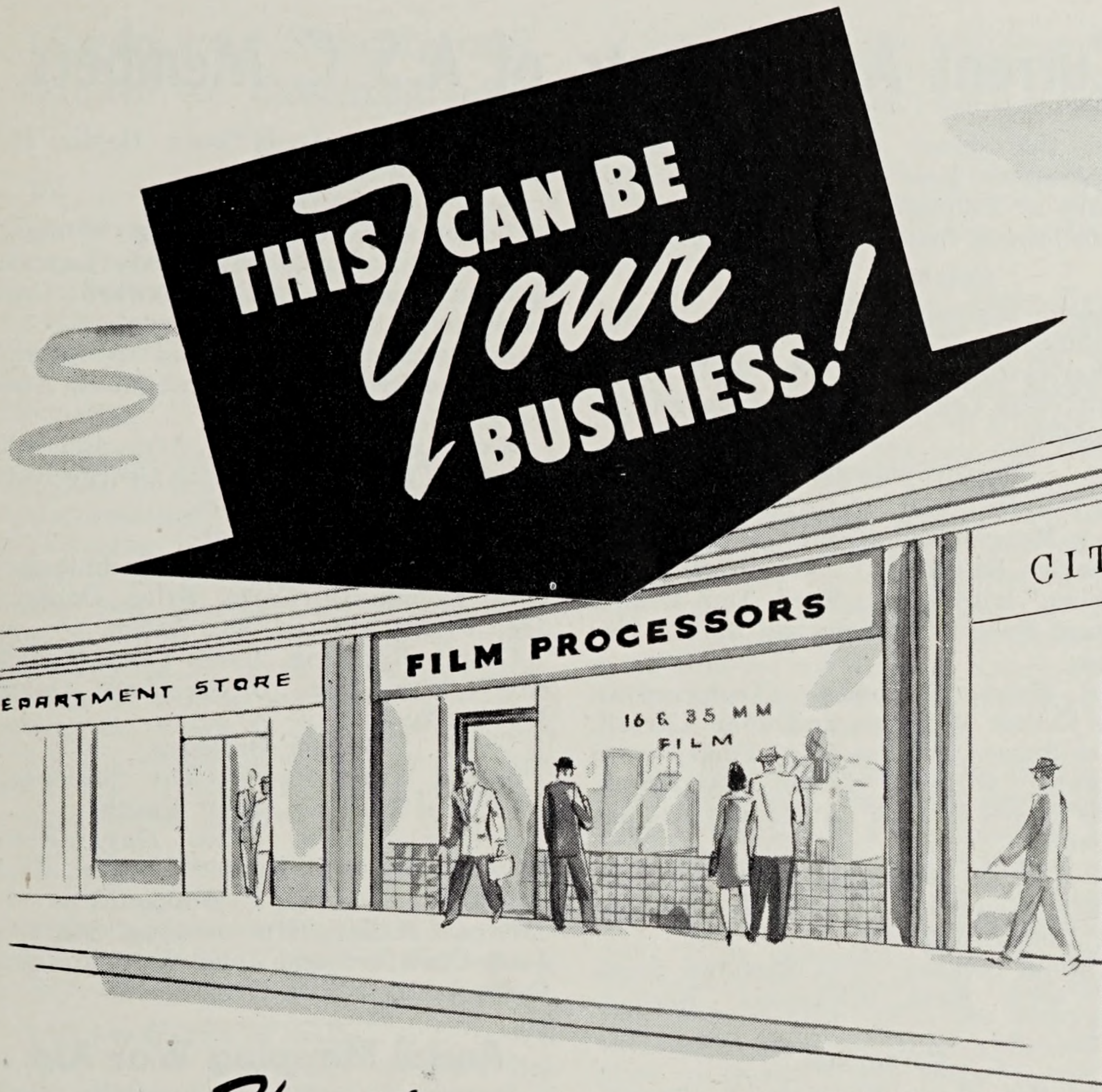
Initial product developed in the research division of Micro-Engineering to be placed on the market is a 16mm splicing machine said to be original in both concept and construction. Its precision tooling is as exacting as splicers turned out for the studios.

Features include base and movable platen arms of dural, finished in black crackle lacquer with polished trim. Platens are stainless steel, hardened, ground and polished to exacting smoothness. Oilite bearings throughout eliminate necessity of oiling.

One registration pin in the left platen, together with cutout guides at the ends of the extra long platens, insures correct registration regardless of any film shrinkage. Scraper is an integral part of the machine, and cannot be misplaced. Its preset blade is of carboloy, which gives it virtually a diamond-hardness and years of service without necessity of replacement. Semi-automatic in operation, the scraper cuts to a depth of .0015 inch and width of .070 inch in one movement, with a spring action returning the scraper to original position.

Lowering of the right platen automatically cuts both ends of the film exactingly, while pressure springs hold the platens together for the seal, which is accomplished with both speed and accuracy. Heating unit in base maintains constant temperature of 110° on the platens to enable sealing and drying of the splice in a matter of seconds. Automatic control prevents overheating.

In marketing the new professional splicer, Mr. Roos discloses that development is currently in progress on a synchronizing machine, a film polisher, a sound reader and viewer, and an editing viewer, for the 16mm producers and studios. Initial models of several are now in construction.



Houston FILM PROCESSING EQUIPMENT IS THE ANSWER

TODAY'S business operations are being speeded and simplified by the use of microfilm and motion pictures. By offering facilities for fast, local processing of such film, the owner of Houston Film Processing Equipment can build a profitable, permanent business.

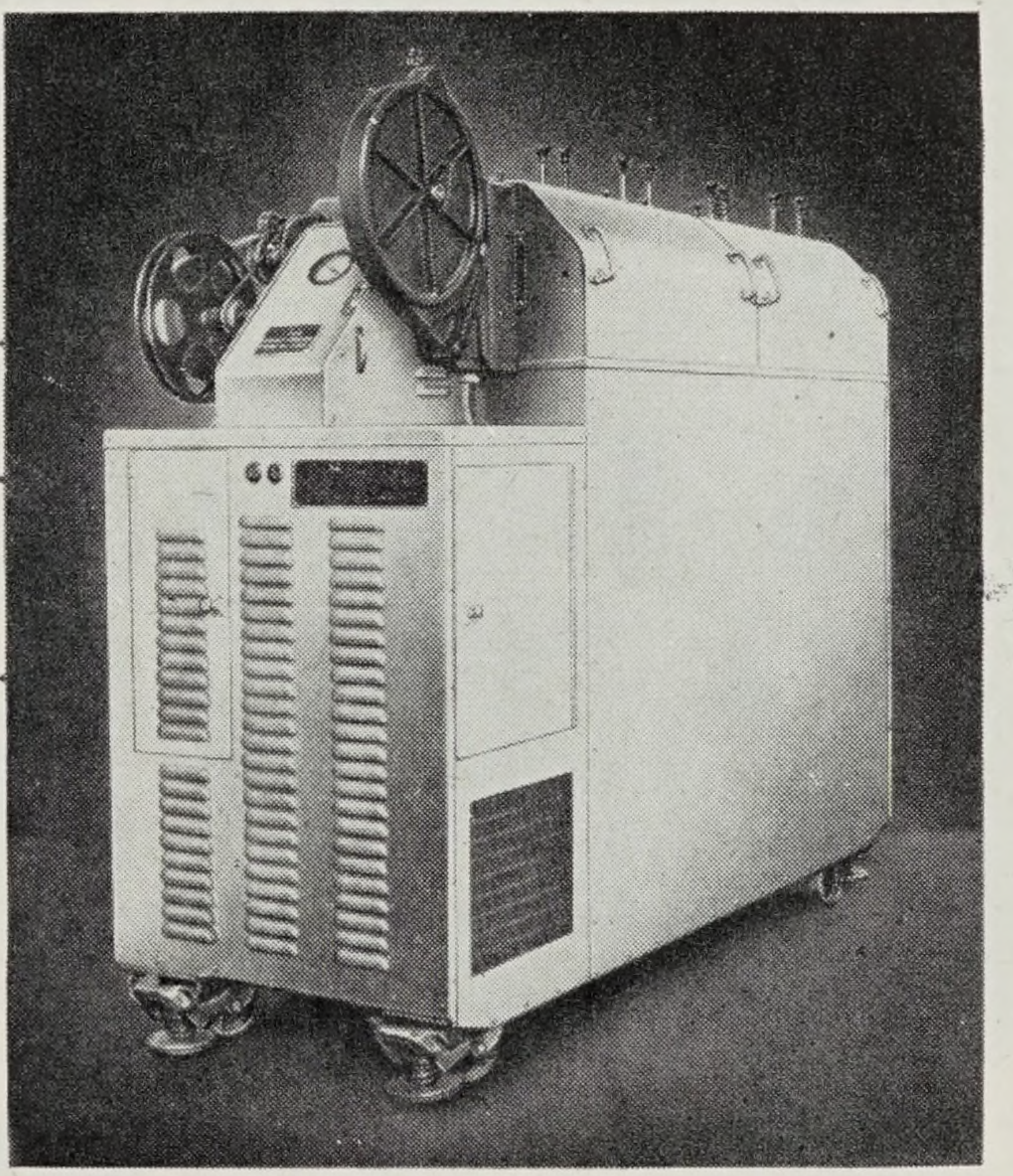
Users of film are everywhere. Mercantile establishments, financial institutions, government agencies and others use microfilm for copying and recording. Manufacturers and sales organizations use both 16 mm. and 35 mm. motion pictures for training and sales. Studios and photographic supply stores constantly need film processing.

To these and scores of other users of film the Houston owner offers a *needed* service—a service becoming increasingly necessary to every community. Houston equipment is the *proven* answer.

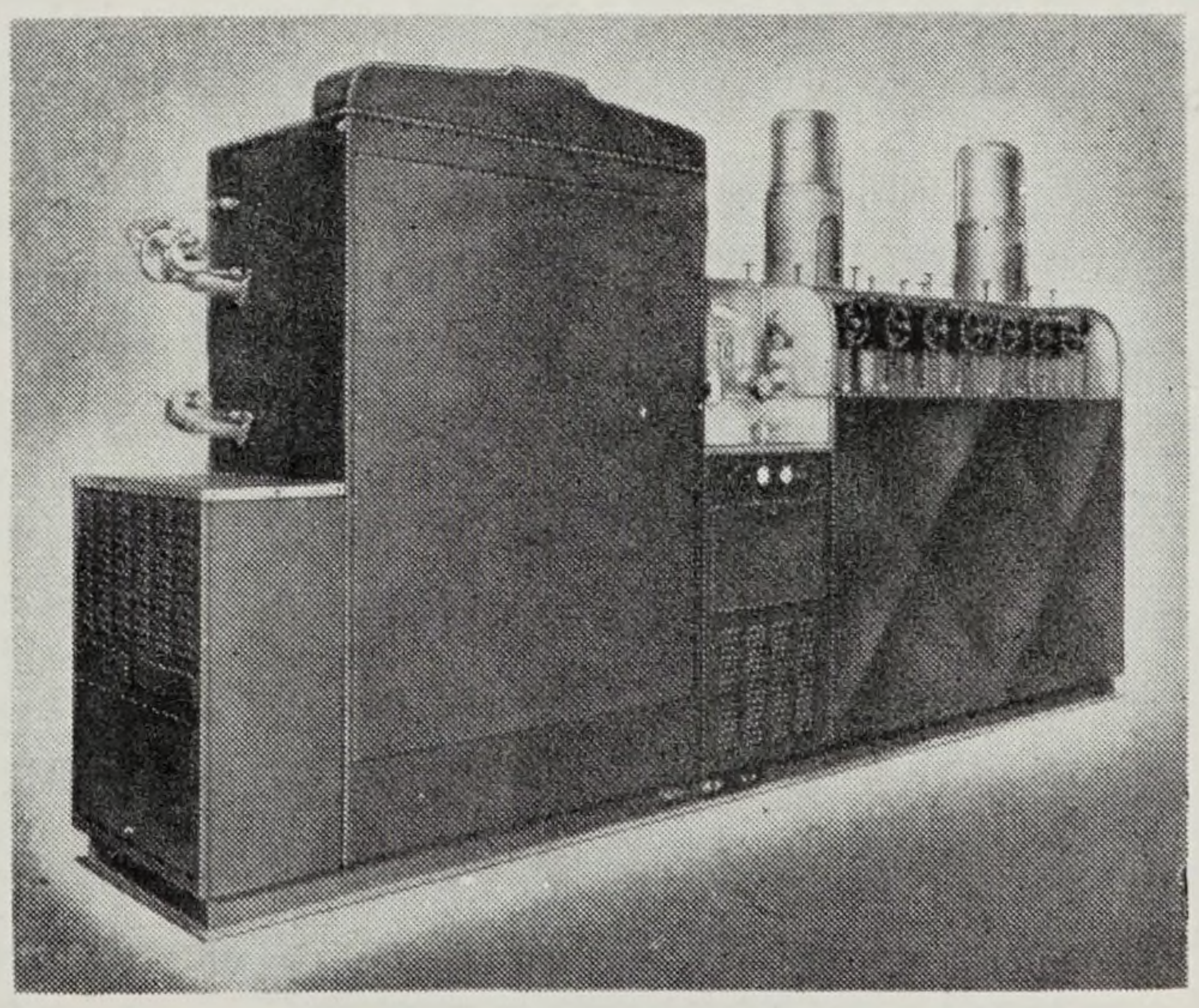
* * *

Houston Film Processing Equipment is designed and built by men who know the needs of this industry. Fully automatic, compact and completely self-contained, these machines require no extra equipment. Write for illustrated folder and prices.

Houston
FILM PROCESSING EQUIPMENT
"TOMORROWS PROCESSING METHODS TODAY!"



***Houston* Model 11** — Processes 16 mm. negative, positive and reversal film. Processing speeds up to 20 feet per min.



***Houston* Model 10** — Processes 35 mm. negative and positive film. Processing speeds up to 2400 feet per hour.

THE HOUSTON CORPORATION
11801 W. OLYMPIC BLVD. • LOS ANGELES 25, CALIF.

Make *Sure* you get it!

"Snow shots can fool you," says Eaton Cromwell, expert travel photographer, "but not when you use a G-E exposure meter. Simply decide whether you want snowy texture or shadow detail—then believe your G-E!"

Let the new G-E meter help *you*. Easy to use. Proved accuracy. Improved light cell. Sturdier. 22% lighter. Don't wait! See your photo dealer and get a G-E meter now. *General Electric Company, Schenectady 5, N. Y.*

3 meters in one . . . for better pictures, for darkroom, and for balancing light.

$23.75
including Federal tax

GENERAL ELECTRIC
606-162M-6336

Current Assignments of A. S. C. Members

As this issue of American Cinematographer goes to press A.S.C. Directors of Photography are assigned to the following feature productions:

Columbia Studios

Joseph Walker, "The Al Jolson Story" (Technicolor).

Charles Lawton, Jr., "The Walls Came Down" with Lee Bowman and Marguerite Chapman.

Metro-Goldwyn-Mayer

Ray June, "But Not Goodbye," with Frank Morgan and Keenan Wynn.

Charles Salerno, Jr., "Faithful in My Fashion," with Donna Reed, Tom Drake, Edward Everett Horton, and Spring Byington.

Sid Wagner, "Fiesta" (Technicolor), with Esther Williams and John Carroll.

Hal Rosson, "Three Wise Fools," with Margaret O'Brien, Lionel Barrymore, Lewis Stone, Edward Arnold and Thomas Mitchell.

Monogram

Harry Neumann, "West of the Alamo," with Jimmy Wakely.

William Sickner, "The Shadows Shadow," with Kane Richmond, Barbara Reed.

Paramount

Ray Rennahan, "California" (Technicolor), starring Ray Milland, Barbara Stanwyck, Barry Fitzgerald.

Russell Metty, "The Perfect Marriage," (Hal Wallis Prod.) with Loretta Young, David Niven, Nona Giffith, Virginia Field.

Lionel Lindon, "O. S. S.," with Alan Ladd, Geraldine Fitzgerald.

RKO SCtudios

Robert de Grasse, "Crack-Up" with Pat O'Brien, Claire Trevor, Herbert Marshall, Wallace Ford.

Leo Tovar, "Desirable Woman," with Joan Bennett, Robert Ryan, Charles Bickford, Virginia Huston.

Roy Hunt, "A Likely Story," with Bill Williams, Barbara Hale.

George Barnes, "Sister Kenny," with Rosalind Russell, Alexander Knox, Dean Jagger.

20th Century-Fox

Ernest Palmer, "Three Little Girls in Blue" (Technicolor), with June Haver, Vivian Blaine, George Montgomery, Frank Latimore.

Harry Jackson, "Strange Triangle," with Signe Hasso, John Sheppard, Anabel Shaw.

Leon Shamroy, "The Shocking Miss Pilgrim" (Technicolor), starring Betty Gable and Dick Haymes.

Arthur Miller, "Anna and the King of Siam," starring Irene Dunne and Rex Harrison, with Linda Darnell and Gale Sondergaard.

Joseph La Shelle, "Cluny Brown," with Charles Boyer, Jennifer Jones, Helen Walker, Sir Aubrey Smith.

Glen MacWilliams, "It Shouldn't Happen to a Dog," with Carole Landis, Allyn Joslyn, Henry Morgan.

Charles Clarke, "Margie," (Technicolor) with Jeanne Crain, Alan Young, Glenn Langan, Lynn Bari, Hattie McDaniel, Esther Dale.

United Artists

Lucien Androit, "The Strange Woman," (Mars Film Corp.) with Hedy Lamarr, George Sanders, Louis Hayward, Gene Lockhart.

James Van Trees, "Me and Mr. Satan," (Premier Prods) with Paul Muni, Anne Baxter, Claude Rains.

Karl Strauss, "Mr. Ace and the Queen," (Tivoli Prods) with George Raft, Sylvia Sidney, Sid Silvers.

Universal

Hal Mohr, "Shahrazad," (Technicolor) with Yvonne De Carlo, Brian Donlevy, Jean Pierre Aumont, Eve Arden.

George Robinson, "Love Takes a Holiday," with Joan Davis, Jack Oakie, Mischa Auer.

Warner Brothers

James Wong Howe, "The Sentence," with Ann Sheridan, Kent Smith.

Arthur Edeson, "Two Guys From Milwaukee," with Dennis Morgan, Jack Carson, Joan Leslie, S. Z Sakall.

Ernest Haller, "Humoresque," starring Joan Crawford and John Garfield; with Oscar Levant, Ruth Nelson.

Aerial Mapping War Aid

Post-war aerial photography programs of government agencies and commercial users are far expanded over prewar days, it was revealed at the annual meeting of the American Society of Photogrammetry, in Washington (Jan. 16-18). Speakers pointed out that because 90 per cent of U. S. military intelligence during World War II was secured from aerial photos, photogrammetry — the science of using these photos to make maps and charts—has a bright future.

Gerald FitzGerald of the U. S. Coast and Geodetic Survey, who, as an Air Forces colonel during the war brought the system of trimetrogon photography —using three wide-angle aerial cameras in synchronization to take horizon-to-horizon pictures — to perfection, was elected the new president of the Society. Vice president is Revere G. Sanders of the Fairchild Camera and Instrument Corporation, who was also honored with the Society's Abrams Award for a paper he had written on stereoscopy.

Bolex Camera Reported Stolen

American Bolex Company broadcasts information on theft of a Bolex camera in Chicago on Dec. 16th, 1945, from auto of William Parker Ward.

Dealers and others are asked to watch for possible offering of sale of the camera, described as a 16 mm. Bolex, No. 13136, with a one inch lens No. 452586, 17 mm. fixed focus f2.7, General Electric light meter, and other equipment.

Any information on the camera should be directed to either the owner, William Parker Ward, 10 South LaSalle St., Chicago 3, Ill., or F. M. Cascaden at American Bolex Co., 521 Fifth Ave., New York.

Government Subsidy and Control for Czechoslovakia Films

Future film production activities in Czechoslovakia will be under the complete control, domination and subsidy of the government, it is disclosed in latest reports from that country. The Czech government has already reorganized its film industry, with a Prague newspaper disclosing:

"The film generally in the new state has been incorporated into the Ministry of Information. The chief of this section is Viteslav Nezval (the most famous Czech living poet and novelist). His advisory body is the Czechoslovak Film Council, which has as members representatives of all the branches of the industry, as well as the Ministry of Education, the Board of Trade, the Institute for the Furtherance of Cultural Relations with the USSR, the film production group, and the Film Workers Union.

"The executive organs of the Czechoslovak Film Council will be the following four committees: Committee for Dramatic Art; Artistic Technical Committee; Policy Committee, and Press Committee.

"All production of motion pictures has been put into the hands of the First Czech Company for the Production of Motion Pictures, which runs all the existing studios and production groups. For Slovakia there is a parallel company. Distribution is centralized and state controlled. Directly state owned and operated are the newsreel company, documentary and instructional units, and the state institute for exhibition, of which one department is the Administration of State Cinemas; also administration of mobile projection units, works cinemas, school cinemas and sub-standard in general.

"The Czechoslovak Film Institute trains artistic and technical workers, administrates the film archives and library, and the film press.

"The Administration of State Cinemas will look after all cinemas (theatres) on Czechoslovak territory. There will be no privately-owned theatres, the reason for which will be obvious to all citizens, considering the important role the film has to play in the life of the nation."

The Czechoslovak studios were virtually unharmed during the war, and the Germans had no opportunity to move out equipment, as happened in other overrun countries. Studio at Barrandow, near Prague, contains 11 stages, two of which are reported to be the largest in Europe at this time.

Most important factor in getting the Czechoslovakian film industry back to normal production along the lines being outlined by the state is raw film stock. None is manufactured in the country, and all such supplies had previously come from Germany. With the latter's film manufacturers still in state of suspension as a result of Allied occupation, there is no assurance when sufficient supplies of positive and negative will be obtained to enable the Czech government to produce on scale planned; although there is a limited supply of negative on hand for some filming for the time being.

During the War—

E. M. BERNDT CORP.

produced sound-on-film recording equipment that went to the Armed services.

NOW—

We hope to furnish the same high quality and service to our peace-time customers.

Auricon division
E. M. BERNDT CORP.
7377 BEVERLY BOULEVARD
LOS ANGELES 36, CALIFORNIA

MANUFACTURERS OF SOUND-ON-FILM RECORDING EQUIPMENT SINCE 1931

AVAILABLE

35mm.

Akeley Camera—7 Sets Lenses, Cases, Extras, Tripod.
Arriflex Camera, 12V, Motor Attached, 28-50-75—F1.8 Astro Pan Tachar Lenses—Magazines—Cases, $1075.00.
De Brie Model "L" Camera, Astro F2.3 Lens, Motor, Tripod.
Round 2-Inch and 3-Inch Square Filters. Tripods — Sunshades.

16mm.

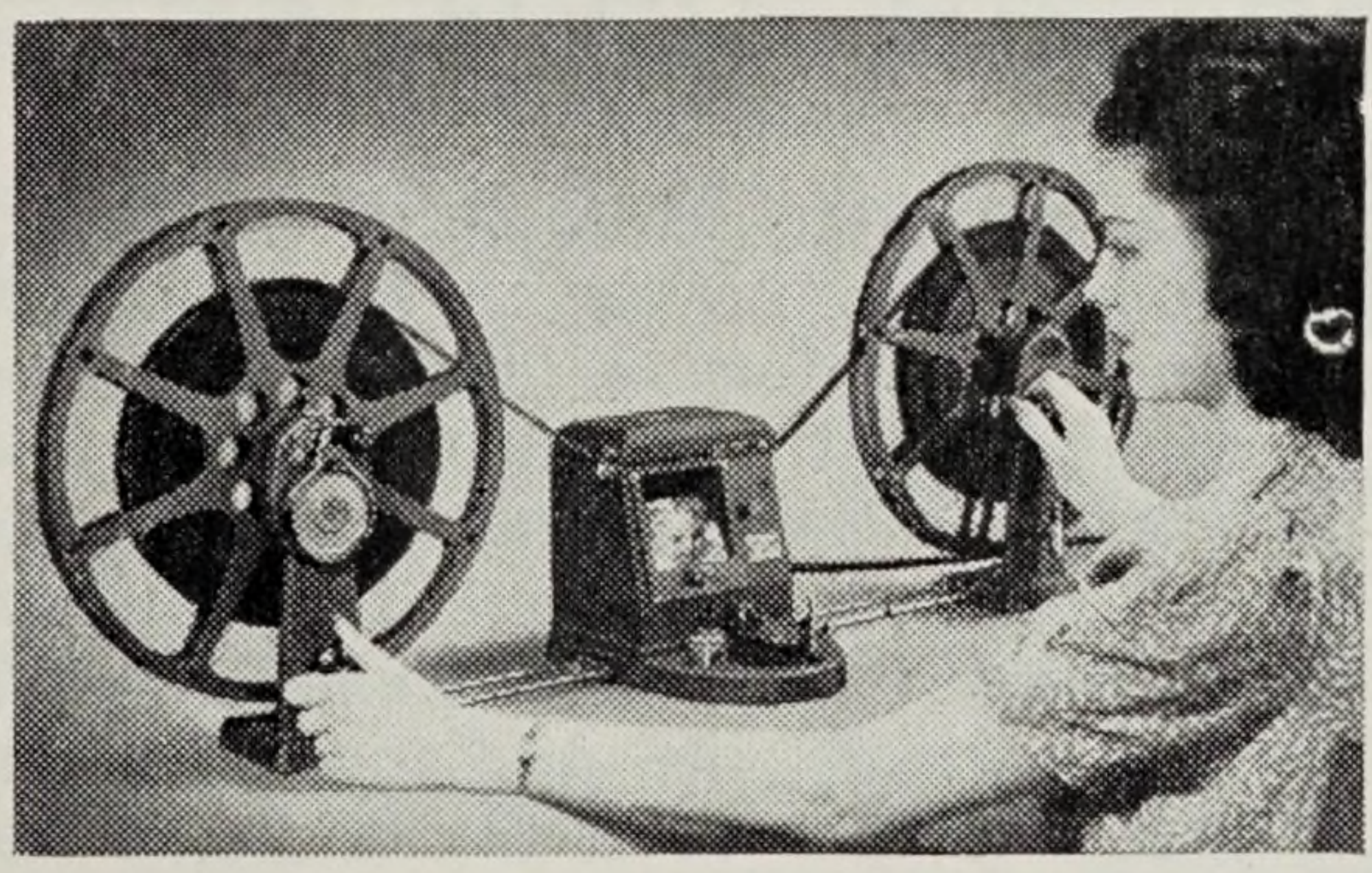
Bolex Complete with 3 Lenses, 200-Foot Magazine Attached, Synchronous Motor, Camart Tripod, Auricon Recorder—Complete $1750.00. All Like New.
Complete Maurer D Recorder.
New Presto Disc 78-33 1/3 Recorder, Microphone, Stand, $350.00.

Send for Semi Professional Camart Tripod Circular

THE CAMERA MART
70 WEST 45th STREET
NEW YORK 19, N. Y.

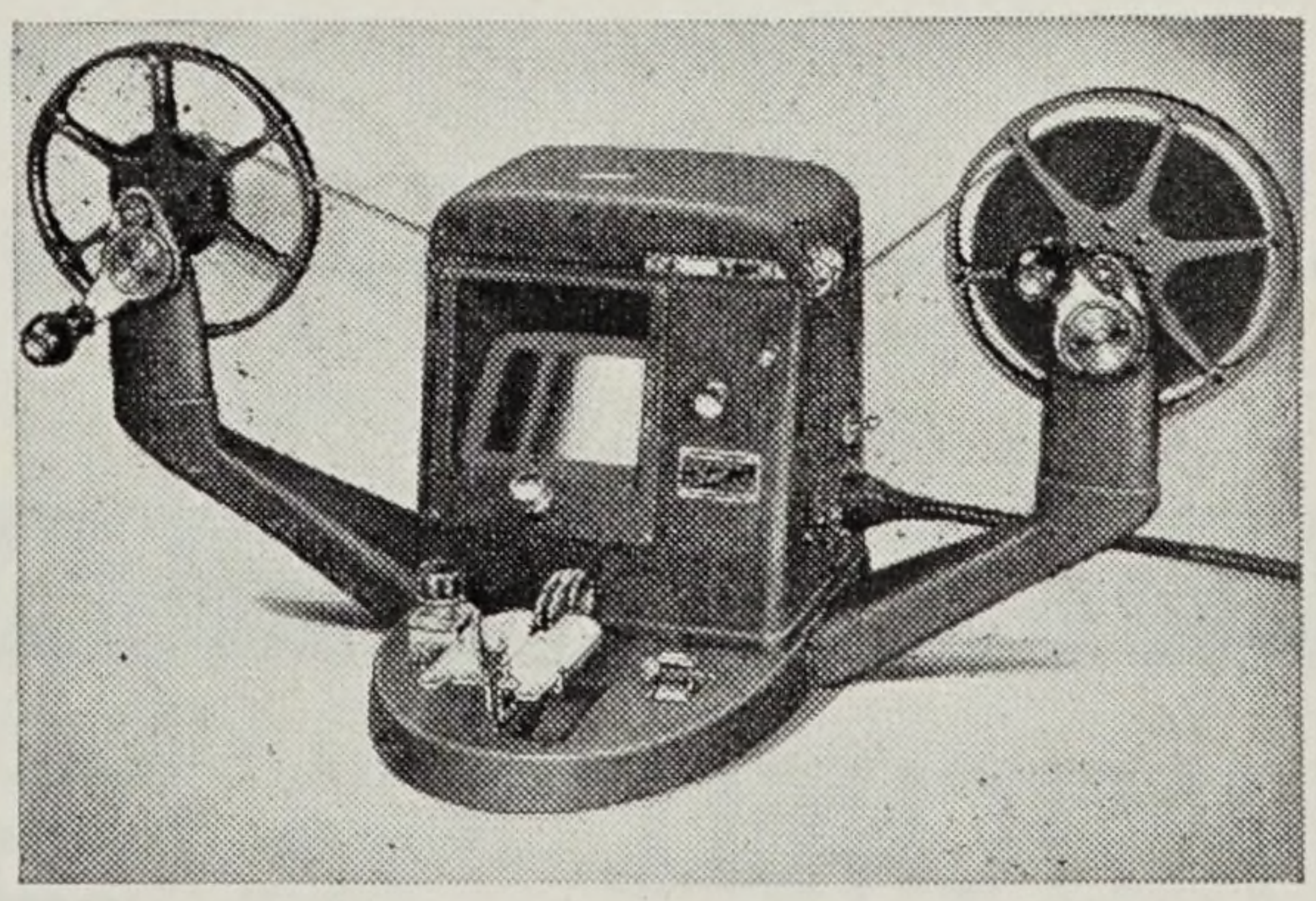
Cable: CAMERAMART
Address Communications to
Irving Browning

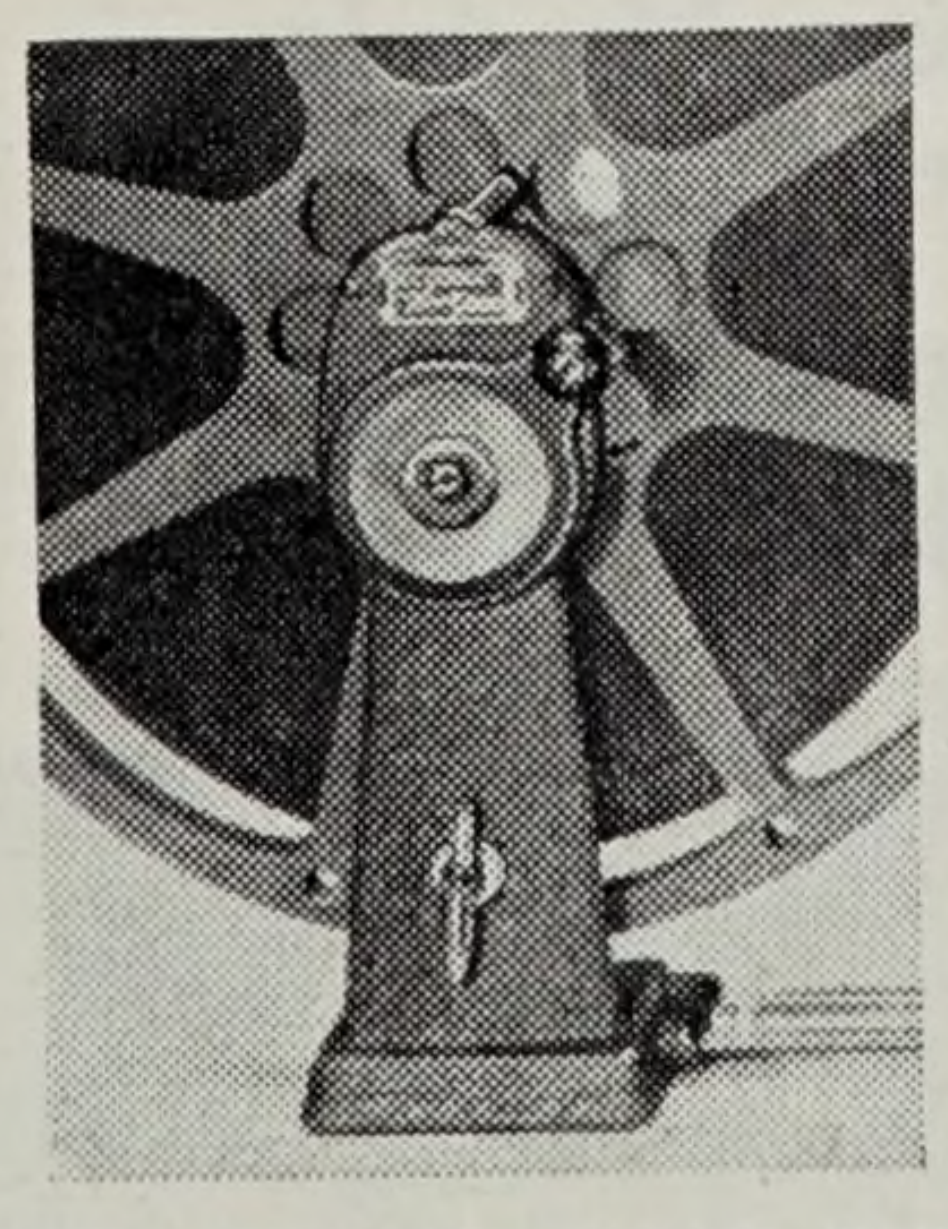
COMPLETE . . . *B&H Filmotion Editors*



16mm. The new B&H Filmotion Editor, finest that money can buy, draws the film through a scratch-proof channel, casts motion pictures brightly on a 3x2½-in. ground glass screen, recessed for easy viewing. Framing and focusing controls. Complete with Viewer, Model 136 Splicer, and two Heavy-Duty Rewinds. Parts available separately.

8mm.
The same Editor as described above . . . with film channel and optical system designed for 8mm. film. Image on viewing screen is 2¼x1¾ in. As in the 16mm. Filmotion Editor, you see your films as actual miniature movies. Spots cutting points easily and quickly. Complete with Viewer, Model 136 Splicer, two Rewinds on extension arms. Viewer can be purchased separately.





Heavy-Duty Rewinds

Attach rigidly to each side of Splicer. Take 16mm. reels up to 2000 feet. Geared for 2 speeds or "free wheeling."

SEE YOUR FILMO DEALER NOW

B&H editing equipment is available now at your dealer's . . . or he can get it promptly. See him, or write Bell & Howell Company, 7148 McCormick Road, Chicago 45.

PRECISION-MADE BY
Bell & Howell

SINCE 1907 THE LARGEST MANUFACTURER OF PRECISION EQUIPMENT FOR MOTION PICTURE STUDIOS OF HOLLYWOOD AND THE WORLD

The Subjective Camera

(Continued from Page 46)

a sound off camera, and registered fright when she realized that she was not alone. At this point, the camera subjectively assumed the point of view of the killer. The frantic charwoman, directing her attention straight at the lens, backed slowly away; while the camera, simulating the lurching gait of the killer, began to close in on her. Terrified, the woman cowered against the wall as the camera lumbered ever closer, ending up in a stark close-up of her frenzied face. When the fade-out came, the killer had not once been shown, and yet the audience had had the unique jolting experience of having directly participated in a murder.

As with any original cinematic technique, the subjective treatment is sometimes misused. Attempts to go "arty" with the device only succeed in confusing the audience and clouding the dramatic significance of the subject matter.

For instance, some years ago a French film version of "Crime and Punishment" was released on the continent and later shown in certain select theaters in America. Following the *fade-in* in one sequence, the audience found itself gazing up into the faces of three characters who were bending over the camera, gesticulating toward the lens and discussing a fourth character. Over continuous dialogue the scene then cut to a shot straight down at the face of a young man who was awakening. About this time the audience realized that it had been seeing the first three characters from the view point of the young man who was just awakening and whom they were discussing.

This sequence utilized the subjective treatment—but its use in this particular instance was forced. When the scene faded in and the audience found itself gazing up at three strange characters, it is true that certain elements of surprise and suspense were established. But for several seconds the audience was lost, so that a good deal of the dialogue went by unnoticed while the audience struggled to orient itself. Obviously, whatever originality was achieved by the use of the device was outweighed by the confusion that followed and by the loss of dramatic meaning within the sequence.

A subjective scene cannot simply be tossed into a sequence at any point. It must be motivated by, and definitely linked to, the objective scenes that precede and follow it. For instance, if we had a sequence in which two men were engaged in an argument that was later to develop into a fist fight, we might have a straight objective shot showing the two men in their relationship to each other as the argument began. As the action mounted, over-the shoulder close-ups would be intercut. Finally there would be a subjective shot of one of the men in close-up directing his dialogue straight at the camera, finally drawing back his fist and aiming it straight at the lens. There would be a quick cut to the other man's face as he received the impact of the blow, and our continuity would be complete.

In a case like this, the one subjective scene would not be merely a trick shot thrown in for haphazard effect, but a carefully planned dynamic device to make the audience experience the impact of the blow as it was struck.

Alfred Hitchcock, who not without good reason is known as the "Master of Suspense," is one of the directors who has used the subjective camera to good advantage. In his precedent-breaking film: "Lifeboat," photographed by Glenn McWilliams, Tallulah Bankhead is shown sitting in the boat while John Hodiak, another victim of the shipwreck, swims toward her. She coolly takes up her hand movie camera and shoots some footage of him as he struggles to reach the boat. At this point, Mr. Hitchcock cut to a subjective angle showing the man as she saw him through the view-finder of her camera.

In this instance, the device was used more for novelty than for any deep psychological effect, although it emphasized a certain facet of Miss Bankhead's character by showing the cool, detached manner in which she preferred to view the struggles of her fellow man. In a film such as "Lifeboat," where the mobility of the camera was necessarily limited by the narrowness of the locale, a shot such as this added an element of variety and cinematic punch to an otherwise straightforward camera treatment.

Mr. Hitchcock, aided by the camera artistry of George Barnes, A.S.C., used the subjective approach even more effectively in one of his more recent films, "Spellbound," a phychological love story. In one sequence the amnesia victim, played by Gregory Peck, is given a drugged glass of milk, and a good deal of the motivation at that point of the story depends upon whether or not he drinks the milk. After a series of straight objective shots narrowing down to a close-up of him raising the glass to his lips, a cut is made to a subjective shot showing what *he* sees as he drinks the glass of milk. As the glass is slowly tipped up, the action in the background

Your Best Investment—
VICTORY BONDS

"GOERZ AMERICAN"
PRECISION PHOTO LENSES
An American Product Since 1899

46 YEARS IN THE FRONT LINE OF PHOTO-OPTICAL EQUIPMENT

Because of their excellence in performance in all branches of photography, in war or peace, the demand for them has tremendously increased.

It will still take quite some time to fill our heavy backlog of orders, for so many different types and sizes, and build up our war-depleted stock for prompt shipment to the dealers all over.

To assure yourself of the earliest possible delivery we urge you to place NOW through your dealer your order for the lens you have selected. You will be repaid for your patience manifold with the satisfaction derived from its use later.

REMEMBER:
For making first-class pictures, a
"GOERZ AMERICAN"
lens will give you a lifetime of pleasure

The C. P. GOERZ AMERICAN
OPTICAL COMPANY
OFFICE AND FACTORY
317 East 34th St., New York 16, N. Y.
AC-2

RENTALS SALES SERVICE

MITCHELL (USED) Standard, Silenced, N. C., Hi-Speed, Process, and Eyemo Cameras. **BELL & HOWELL** (USED)
Fearless Blimps and Panoram Dollys—Synchronizers—Moviolas
35mm Double System Recording Equipment

WE SPECIALIZE in REPAIR WORK on MITCHELL and BELL & HOWELL CAMERAS

FRANK·ZUCKER
CABLE ADDRESS: CINEQUIP
CAMERA EQUIPMENT CO.
1600 BROADWAY N.Y.C.
CIRCLE 6-5080

becomes subordinated by the edge of the glass until the white liquid gurgles up around the lens blanking out the scene for a *fade-out.*

Purists might complain that in this case the device was forced, but actually it added a good deal to the impression that this man was viewing his surroundings in a very narrow way, hemmed in, as he was, by amnesia. It helped the audience to assume his warped point of view.

Again, in the same film, the subjective device was used even more effectively. During the climatic sequence, when the exposed murderer is about to kill the young psychiatrist played by Ingrid Bergman, the camera becomes the murderer's eye. We see what he sees as he sits in his chair with his gun pointed at his victim. In a unique composition we see his hand and gun in the foreground of the frame, and Miss Bergman in the background as he slowly tracks her course of movement about the room. Then, as she convinces him that another murder can solve nothing, he slowly turns the gun on himself (i.e., at the camera) and fires.

The impact of this scene was amazing. Audiences viewing it become participants in expected murder (vicariously, of course), and then became victims of a suicide. They were drawn wholeheartedly into the action and allowed to participate. The suspense was masterfully built to a climax, and the denouncement packed a wallop. "Spellbound" is a better film for so original a device.

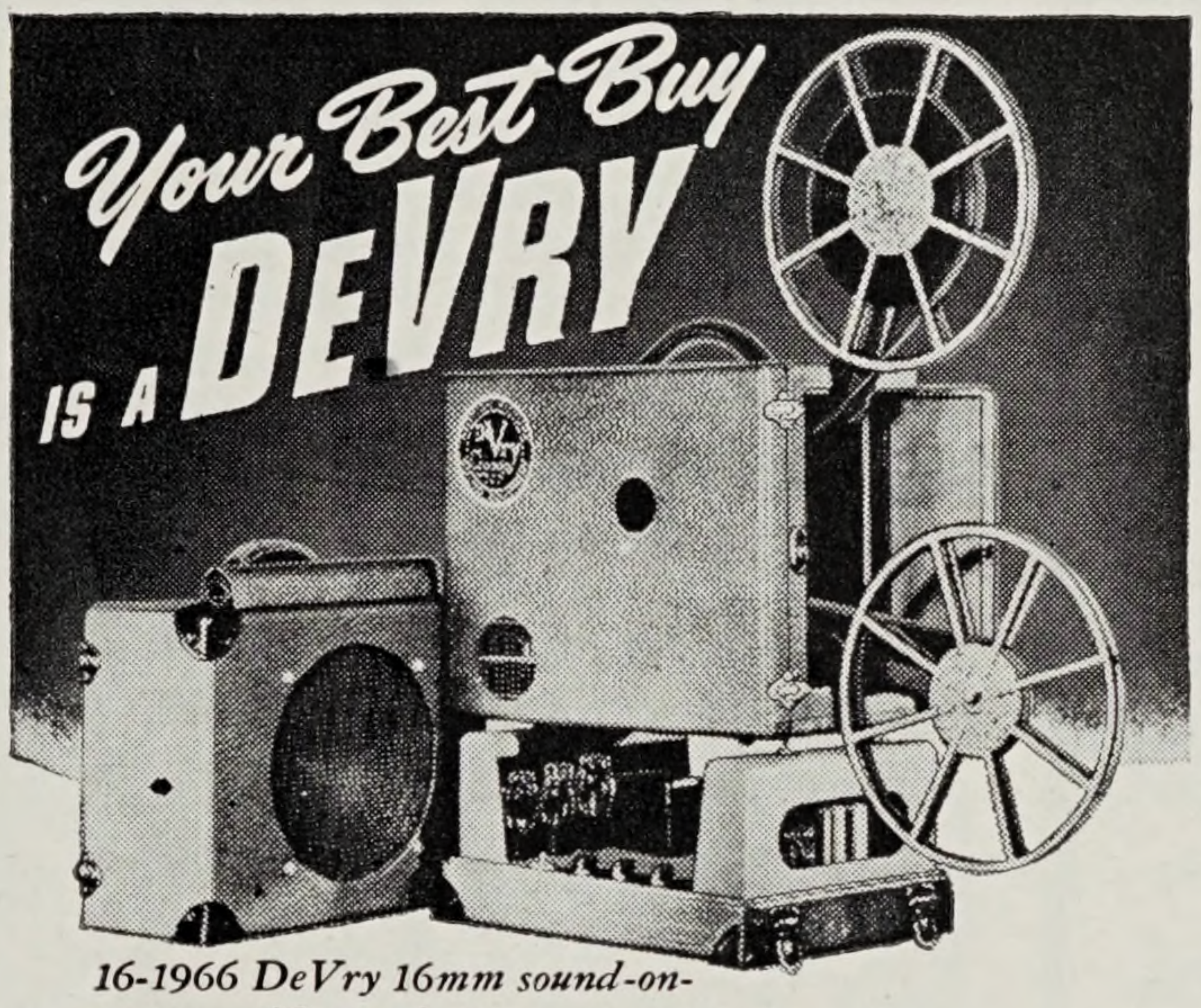
Closely allied with this *visually* subjective type of scene is the kind of subjective sequence that pictures the *mental* conflicts suffered by a character. This type of sequence usually takes the form of a montage picturing either the distortions of a dream or the disconnected impressions of a deranged mind. An especially good example of this device was the almost-frightening subjective montage used to portray the nervous breakdown of a character in the film: "Blues in the Night."

This montage, technically one of the finest ever put on the screen took a number of realistic objects from the life of the character, whirled them around, distorted them, and exaggerated certain details, just as a man's mind would do if he were suffering a mental crack-up.

Most dream sequences are not truly subjective—since the camera is still a detached observer, merely recording what the characters are supposedly dreaming. However, the surrealistic dream sequence designed by artist Salvador Dali for the film "Spellbound," held a certain subjective feeling because it showed impressions as they were received by the character, not realistic—but distorted, and shown from his point of view.

Recently the author wrote the screenplay for a two-reel short subject which is *entirely subjective.* That is to say, everything that appears on the screen is shown as it is seen by the main character, so that obviously he himself is never seen until the climax of the film when he appears before a mirror. The illusion of complete subjectivity is heightened by a stream-of-consciousness narration bended with direct dialogue.

It is, of course, self-evident that such a film could only be placed on the screen as a novelty short. A feature-length film done entirely with this approach would become monotonous. However, the use of single subjective scenes or sequences carefully motivated and executed in a feature-length screenplay (whose subject matter calls for such a device)—can be of immense value in bringing the audience into the story. Properly used, it becomes an integral part of the overall approach of the film, and perfectly utilizes the camera as the "eye" of the motion picture.



16-1966 DeVry 16mm sound-on-film projector.

The 3-Purpose Projector

Built like a fine watch—powered by a steady smooth-running motor and mechanism that purrs through reel after reel without a flutter or a jump—so simple, a 12-year-old can operate it—that's the new DeVRY 16mm. Sound-On-Film Projector. The new DeVRY is a 3-purpose unit:

(1) That SAFELY projects both sound and silent films;
(2) that shows BOTH black-and-white and color films without extra equipment; and
(3) whose separately housed 25 watt amplifier and sturdy 12-inch electro-dynamic speaker afford portable Public Address facilities — indoors and out.

Shoot your movies with a DeVRY 35mm. or 16mm. camera—the camera preferred by cinematographers for their personal use.

DEVRY

Only 5-TIME WINNER of Army-Navy "E" for the production of motion picture sound equipment

1111 Armitage, Chicago 14

ORIGINATORS & IMPROVERS OF PORTABLE MOTION PICTURE EQUIPMENT...SINCE 1913

FOR LIGHT ON EASTERN PRODUCTION--

C. ROSS

For Lighting Equipment

As sole distributors East of the Mississippi we carry the full and complete line of latest-type Inkie and H.I.-Arc equipment manufactured by

MOLE-RICHARDSON, Inc.
Hollywood - California

Your requirements for interior or exterior locations taken care of to the last minute detail anywhere

☆

MOTOR GENERATOR TRUCKS

RENTALS SALES SERVICE

☆

CHARLES ROSS, Inc.

333 West 52nd St., New York, N.Y. Phones: Circle 6-5470-1

Shooting AAF Training Films

(Continued from Page 43)

Mitchells. At various times, AT-6s and AT-11s were employed, but type of camera ship depended entirely on air speed required in flight to follow the subject planes of the specific filming job.

Ingenuity on Location

With a small camera crew, and necessarily compact camera equipment flown to the fields for filming operations, it was necessary to continually improvise various methods to achieve desired results. For example, where moving camera shots were desired, there were no studio running insert cars, with special construction to insure steadiness of the camera, available thousands of miles from Hollywood. So camera parallels were mounted on trucks, and tires of the latter were deflated about half of normal pressure to insure smoothness in operation to secure the required running shots.

At Wright Field, on one assignment, Captain Tutwiler was required to make several interior shots with photoflood lighting; and desks were used for the camera standards. Improvision was the rule rather than the exception on nearly every film, and the small crew of three versed in film production technique in the studios generally was able to achieve the desired results with quite satisfactory results.

Color and Black-and-White 35mm

During his three years with the AAF photographic unit, Captain Tutwiler used 35mm negative exclusively, and never once was assigned to make 16mm size. Of the large amount of color exposed, it was all 35mm monopack which was processed by Technicolor.

Special Effects Technique Used

Much use of special effects photography was made by Captain Tutwiler, who explains that many instances arose where it was necessary to accentuate specific features for more direct and impressive visual instruction, and background plates were incorporated, especially for close-ups of the actors in the mockups. Of his own air footage, Captain Tutwiler discloses that 95 per cent was actually shot in or from planes, and there was no recourse to miniatures. Only exception was a few instances where plane explosion shots were required by the script.

Navy Blimp as Air Parallel

In making films of the performance of the P-51 (Mustang), script requirements called for complete loops, Immelmans, and other fast air gymnastics. Such shots were impossible to obtain from another plane of any type. So the Air Force called on the Navy for loan of a blimp to allow the camera to remain stationary in the air and follow the intricate and lightning-fast maneuvers of the P-51 while the latter was in flight. In other words, the Navy blimp became virtually a camera platform suspended in the air 4,000 feet above the ground. Idea of using the blimp for the filming which could not have been achieved in any other manner was generated by Captain Tutwiler and the base liaison officer to solve the problem. Cooperation of the Navy for use of the blimp was readily obtained from the Richmond Naval Air Base, Florida.

Captain Tutwiler utilized a blimp on a second occasion when he was assigned to handle high speed photography on parachute jumps from the B-32. The blimp as an aerial camera platform again solved an otherwise impossible camera problem.

Equipment and Lens Used

Most of the air filming by Captain Tutwiler was shot with a 50mm lens, and at no time did he go beyond a 100mm. His professional reason was that, in extreme long focal length lenses, it is impossible to avoid natural vibration while shooting from a plane.

His filters varied all the way from the 15 to 29 filters and combinations, depending on what effects were required. A rack-over Bell & Howell camera equipped with Zeiss 3.5 lens—all elements of which were coated—was principally used by Captain Tutwiler; while all high-speed photography was accomplished with a special Mitchell speed camera.

Final Assignments

One of Captain Tutwiler's final assignments with the AAF photographic units was the filming of a special instructional reel—top secret—detailing the use and operation of radar in firing guns at night from the big Flying Fortress bombers. It was a highly technical subject in both itself and photographically, and was used for the instruction of bomber crews during the final attacks on Japan.

The P-51 fighter sequence in "The Last Bomb," a special War Department documentary feature in four reels which is to be released through the theatres, was photographed by Captain Tutwiler entirely in Monopack.

Captain Tutwiler is particularly proud of special commendation issued in January, 1944, by Col. P. H. Robey of the XX Bomber Command, Smoky Hill Army Air Field, Salina, Kansas, for his flight and operational training film of the B-29.

Although he had many narrow escapes while with the AAF, Captain Tutwiler did not sustain any sort of injury while on duty. He did, however, sprain an ankle in the surf at Florida while swimming, which only goes to demonstrate that the safer a place seems to be, you can get into trouble!

BLUE SEAL

Announces

A Complete New Line Of Sound Equipment

▼

- Film Recorders 16 and 35 mm
- Variable Area Galvanometers
- Recording Amplifiers
- Re-Recorders
- Equalizers
- Camera Motors
- Selsyn Interlock Systems

▲

Special Equipment Built on Order

▼

J. Burgi Contner Louis R. Morse

BLUE SEAL
Cine Devices, Inc.
137-74 Northern Blvd.
Flushing, L. I., N. Y.

Cable Address—SOUNDFILM

CAMERA SUPPLY COMPANY
ART REEVES

1515 North Cahuenga Boulevard
HOLLYWOOD Cable Address—Cameras CALIFORNIA

Efficient-Courteous Service New and Used Equipment
Bought—Sold—Rented
Everything Photographic Professional and Amateur

An unusually fine variety of basic photo chemicals always in stock.

MOVIOLA
FILM EDITING EQUIPMENT
Used in Every Major Studio
Illustrated Literature on Request
Manufactured by
MOVIOLA MANUFACTURING CO.
1451 Gordon Street Hollywood 28, Calif.

Simplified Movie Processing

(Continued from Page 58)

however, numerous "sub-standard" brands on the market which are purchased *without* the processing included, at substantial savings. This doesn't mean these films are of an inferior quality, but simply that the expense of laboratory handling is eliminated, and this saving passed on to the customer. These are the films that may be developed at home in your own darkroom, conveniently, profitably, and satisfactorily. In this group of easy-to-handle films also belong the familiar "positive" type emulsion, frequently used by title makers, and put out by all the leading manufacturers, such as Eastman, Ansco, and DuPont. Of all available varieties, this is undoubtedly the most economical of all.

The beginner does well to limit himself to developing shorter lengths of film, not to exceed about 25 feet at a time, which may be manipulated with little trouble on the type rack illustrated. Also, he is advised to restrict himself to "straight" developing, which is all that is required in title making, when the title cards are made in *reverse* of the way they are to appear on the screen, viz black letters on white cards. The aforementioned positive film is well suited for this work, since it is extremely contrasty.

A glance at the accompanying photographs will be sufficient for those accustomed to darkroom procedure to grasp the technique of the process. To others, the following paragraphs may prove of value.

The film is spooled in the darkroom onto a rack similar to that pictured, which is so constructed that individual film loops cannot overlap, and no portion of the picture surface itself actually touches the rack. The rack is usually made of aluminum alloy or wood coated with some sort of preservative, and should be in such a size as to fit a conventional developing tray, utilizing a minimum of solution. A rack to accommodate film in the length mentioned requires about a gallon of solution.

Ordinary D-72, D-76 or their equivalent, serves as the developing agent. For extreme contrast, such as in title work, D-11 is recommended. After the

(Continued on Next Page)

Bass
pays
CASH!
for your Camera and Equipment
BASS

I want to buy your

- Contax
- Leica
- Graphic or
- Miniature
- Camera

Send it in . . . merchandise returned postpaid if not entirely satisfied.

Bass Camera Co.
179 W. MADISON ST.,
CHICAGO 2, ILL.

Add SOUND TO YOUR SILENT FILMS
(Music • Narration • Special Effects)

LET us convert your 16 mm picture to a sound film of the highest quality. Skilled technical staff, and finest sound recording equipment and studio facilities to serve industrial, amateur and educational film producers. Write TELEFILM, Inc., Dept. 6039 Hollywood Blvd., Hollywood 28, Calif. for prices and literature.

OUR SERVICE IS USED BY:
- AiResearch Mfg. Co.
- Lockheed Aircraft Corp.
- Douglas Aircraft Co.
- Food Machinery Corp.
- U. S. Naval Photo Services Dept.
- Santa Fe Railroad
- Standard Oil Co. of Calif.

TELEFILM
HOLLYWOOD

8 Enlarged TO 16 Reduced TO 8

Geo. W. Colburn Laboratory
Special Motion Picture Printing
995 MERCHANDISE MART
CHICAGO

Scheibe's FILTERS
In World-Wide Use

HOLLYWOOD STUDIOS USE THEM IN EVERY PRODUCTION

GRADUATED FILTERS - for Moonlight and Night Effects in Daytime. Diffused Focus and Fog producing Filters. The Original Monotone and many others.

WRITE FOR FOLDER TWinoaks 2102

SINCE 1916

George H. Scheibe
ORIGINATOR OF EFFECT FILTERS
1927 WEST 78TH ST. LOS ANGELES, CAL.

RUBY CAMERA EXCHANGE

Rents . . . Sells . . . Exchanges

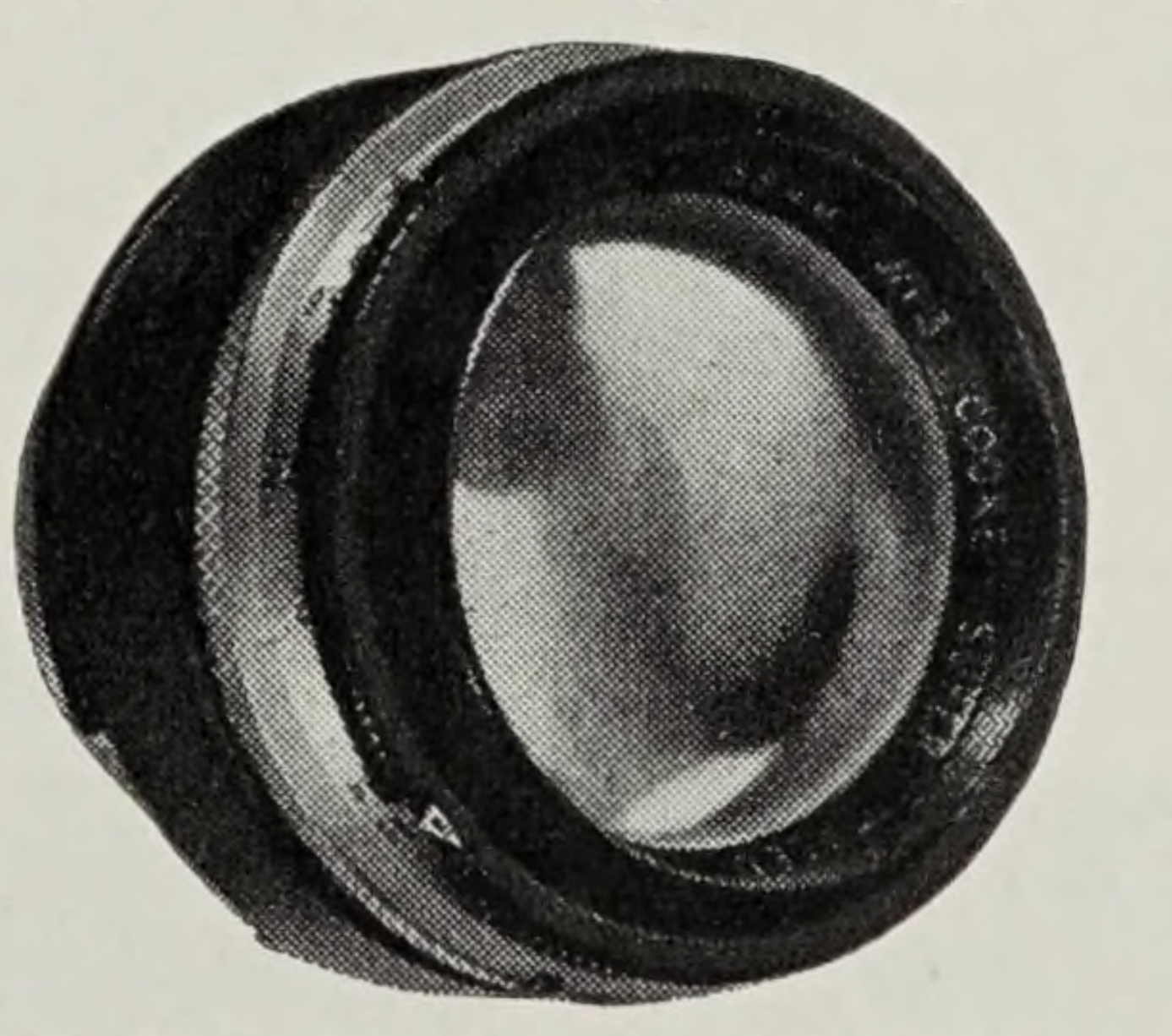
•

Everything You Need for the
PRODUCTION & PROJECTION
of Motion Pictures Provided by a Veteran Organization of Specialists

35 mm. . . . . . . 16 mm.

IN BUSINESS SINCE 1910

729 Seventh Ave., New York City
Cable Address: RUBYCAM



B&H-THC LENSES

B&H-Taylor-Hobson Cooke Ciné Lenses are designed to serve you for many years. They anticipate constant improvement in the resolving power of films, and are fully corrected for extended spectrum color processes. Write for literature.

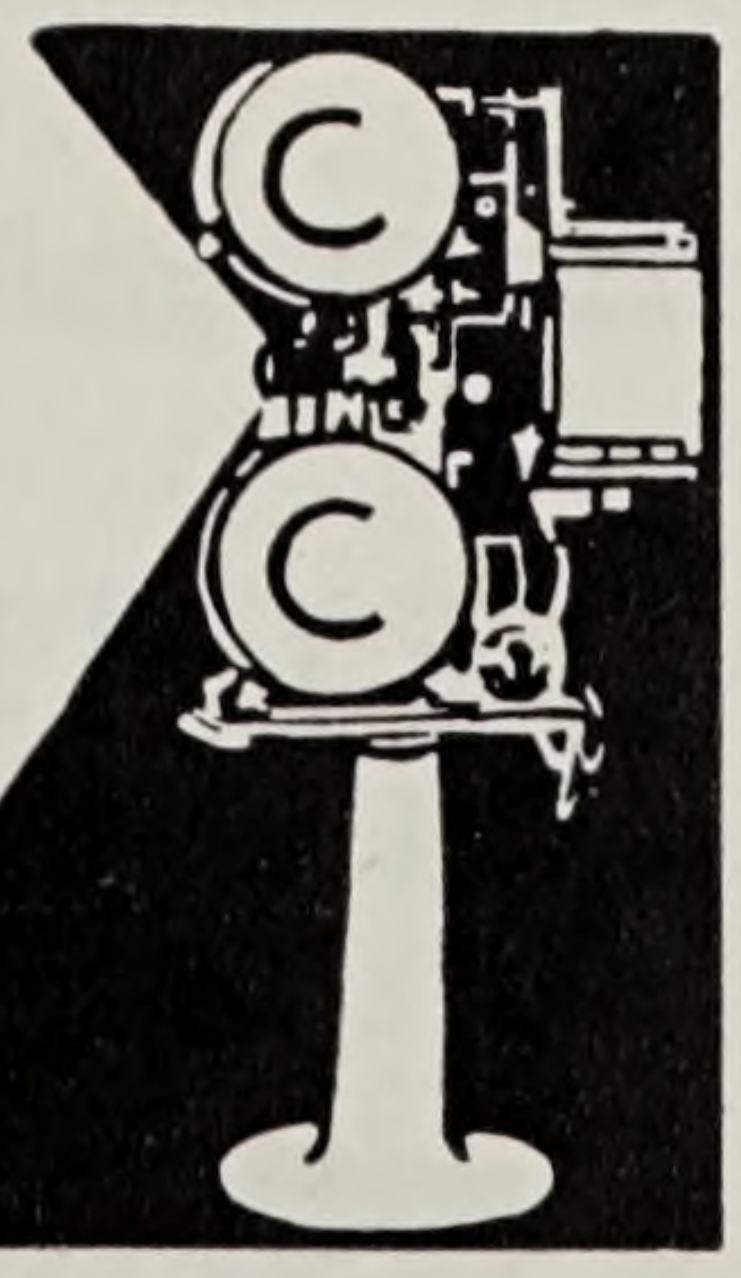
BELL & HOWELL COMPANY
Exclusive world distributors
1848 Larchmont Avenue, Chicago
New York: 30 Rockefeller Plaza
Hollywood: 716 N. La Brea Ave.
Washington, D.C.: 1221 G St., N.W.
London: 13-14 Great Castle St.

EVERYTHING PHOTOGRAPHIC
AND CINEMATIC

FOR PROFESSIONAL AND AMATEUR

The World's Largest Variety of Cameras and Projectors. Studio and Laboratory Equipment with Latest Improvements as Used in the Hollywood Studios. New and Used. BARGAINS.

Hollywood Camera Exchange
1600 CAHUENGA BOULEVARD
HO 3651 Hollywood, California Cable Hocamex



Simplified Movie Processing

(Continued from Preceding Page)

rack is immersed in the tray, the film is agitated, by rocking, and the rack turned over in the tray occasionally, during the process. Development is carried out to the time specified by the manufacturer of the chemical.

From the developer, the film is removed to another tray containing water or a "short-stop" solution, where it is rinsed thoroughly before transferring to a third tray containing the fixing solution, regular acid hypo and hardener. In the case of reversal processing, however, instead of the film being placed in the hypo, it must first pass through a bleach to dissolve the negative image, after which it is "flashed" to a light source, exposing the remaining silver salts, which in turn will form the positive image, after being *redeveloped*, to bring out this heretofore latent picture. (Bleach may be obtained from Superior Bulk Film Co., 188 W. Randolph St., Chicago, Ill., and numerous other sources.)

It was not the writer's intention to deal with the complexities of reversal processing, but rather to keep the developing process on a simplified basis. In either system, however, when fixing is complete, the film is thoroughly washed in running water until all traces of hypo have disappeared, and then hung up to dry, rack and all. Sponging off excess water helps prevent spots.

Needless to say, the entire developing phase must be handled under a safelight suitable for the particular type film being developed, which ranges from the comparatively bright orthochromatic red to the very faint panchromatic green.

From camera to screen becomes a matter of hours, instead of days, when you try this simplified movie processing in your own darkroom.

Sound Services, Inc.

1021 Seward St.
Hollywood 38, Calif.

COMPLETE
SOUND SERVICE
FOR THE
INDEPENDENT
PRODUCER
35 MM.—16 MM.

Western Electric
RECORDING

Classified Advertising

FOR SALE

WE BUY, SELL AND RENT PROFESSIONAL AND 16mm EQUIPMENT, NEW AND USED. WE ARE DISTRIBUTORS FOR ALL LEADING MANUFACTURERS. RUBY CAMERA EXCHANGE, 729 Seventh Ave., New York City. Established since 1910.

BRAND NEW, LATEST STYLE, 16mm. sound projector, facotry guaranteed; also one slightly used, cheap. Box 875, Reading, Pa.

COMPLETE FILE OF THE AMERICAN CINEMATOGRAPHER from August 1932 to December 1944 inclusive. File through 1939 bound in black leather-backed cloth, gold lettering. Last five years not bound. Valued at $100.00. Write best offer. Box 1029, AMERICAN CINEMATOGRAPHER.

24 VOLT Lightweight. Commercial Cine Special Motor, $145.00 complete. 12-24 Volt Eyemo Motor, complete $166.00. 110 Volt AC Motor for Bell & Howell Standard, $85.00. Above motors are exact type used by Army Air Force. They are the finest made. Reynolds 16mm. bench printer 400 ft. sound and picture continuous, motor, manual lightchange, regular $1,550.00, like new—Special $885.00. 100 ft. Daylight loading Eastman Panchromatic, Agfa Finopan, 16mm. negative $2.10. Reels, Cans, New, Used. Bargains. Mogull's, 57 W. 48th St., New York 19, N. Y.

THREE SPEED EYEMO, Cooke lens, $275.00; DeBrie Optical Printer, $4,975.00; RCA Recorder with Noise Reduction, $1,650.00; Cinekodak or Eyemo 24V Motors, $147.50; Double System Recorder, 6-BH magazines, motor, microphone, amplifiers, etc., complete, $1,195.00; Akeley Newsreel Camera with 5 magazines, Gyro tripod, 2 lenses, motor, $995.00; DeBrie metal camera, 8 magazines, $195.00; Quartz slits, $39.50. Send for Catalog. S. O. S. CINEMA SUPPLY CORPORATION, NEW YORK 18.

LENS BARGAINS

1" Eymax fixed focus F:4.5, in Eyemo mount, each with screw-in Aero filter, price, each	$ 37.50
6" Eymax telephoto F:4.5, fixed focus, Eyemo mount, price, each	65.00
125 mm. Astro Pan-Tachar F:2.3, in focusing mount, price	135.00

BASS CAMERA COMPANY, 179 West Madison Street, Chicago 2, Ill.

SIX 2000 Watt Hollywood sun spot lights, complete with heavy duty dollies and shipping crates. Excellent condition. $85 each. Thos. J. Barbre, 1215 East Virginia Avenue, Denver, Colorado.

DENSITOMETER. Martens Prism type. Excellent condition. Price $125 net. Free Head Tripod with medium legs. Good condition $200. Carl Nelson, 164-12 110th Road, Jamaica, N. Y.

MISCELLANEOUS

ALEXANDER LENARD, Turbo, Kenya Colony. Organization and conduct of photographic and film expeditions to all parts of Africa. Tourists met on East and West Coasts of Africa and accompanied by Travel experts. Unusual itineraries. Expert leadership. Write or cable LENARD, TURBO, KENYA COLONY.

HOME MOVIE FANS, JOIN MOTION PICTURE Educational Society. Free valuable information. Box 875, Reading, Pa.

WANTED

WANTED TO BUY FOR CASH
CAMERAS AND ACCESSORIES
MITCHELL B & H EYEMO DEBRIE AKELEY
ALSO LABORATORY AND CUTTING ROOM
EQUIPMENT

CAMERA EQUIPMENT COMPANY
1600 BROADWAY, NEW YORK CITY 19
CABLE: CINEQUIP

WE PAY CASH FOR EVERYTHING PHOTOGRAPHIC. Write us today. Hollywood Camera Exchange. 1600 Cahuenga Blvd., Hollywood.

LABORATORY, STUDIO OR RECORDING EQUIPMENT, SOUND PROJECTORS, CAMERAS, TRIPODS. PAY HIGHEST PRICES. S. O. S. CINEMA SUPPLY CORPORATION, NEY YORK 18.

Through the Editor's Finder

(Continued from Page 50)

volume of negative and positive required for the armed forces, and to keep the film industry adequately supplied.

But now, with the pressure eased somewhat, those machines in the plants must be cut off from production in units for major overhauling and rebuilding. Naturally such removal of equipment reflects in lowered factory capacity, and may temporarily result in film shortages. But it will only take a few months to overhaul the film manufacturing machines to eliminate any chance of possible shortages or diminished output in the future from that cause.

Another important factor, however, is the loss of workers since the war ended. Many were women who decided to quit work in the film factories, requiring the companies to secure and train replacements.

BUY MORE BONDS

NATURAL choice for general studio use, for composite projection background scenes, and for exteriors under poor lighting conditions . . . Eastman Plus-X Negative Film, one of the family of Eastman Films, favorites of the motion picture industry for more than fifty years.

EASTMAN

Plus-X...ALL-PURPOSE NEGATIVE FILM

EASTMAN KODAK COMPANY, ROCHESTER 4, N. Y.
J. E. BRULATOUR, INC., Distributors
FORT LEE, CHICAGO, HOLLYWOOD

The Finest and Most Complete Home Projector

Filmo DIPLOMAT

NOW BETTER THAN EVER BEFORE!

Brilliant New 1000-Watt Illumination

Available soon—if your Bell & Howell dealer does not already have it—is the finer, improved Filmo Diplomat, the most complete 16mm projector for silent movies.

A new 1000-watt lamp gives screen pictures new brilliance—not only in the home but also for larger gatherings in the church, club, school, or modest auditorium.

New Coated Lens

The Diplomat may now be obtained with a coated lens. B&H lens coating reduces reflection, permits maximum passage of light, and improves definition of screen pictures.

Standard equipment includes built-in pilot light, easy-action tilt control, and radio interference eliminator.

Wholly gear-driven, with no chains or belts inside or outside, the Diplomat is silent and trouble-free in operation.

Variable Resistance and Voltmeter Are Optional

And remember, the Diplomat is now built to show sound as well as silent films. The sound will not be heard, of course, but this feature makes it possible to show many fine motion pictures heretofore restricted to sound-on-film projectors.

See your Bell & Howell dealer today . . . or send the coupon for full information on the new Filmo Diplomat. Bell & Howell Company, Chicago; New York; Hollywood; Washington, D. C.; London.

Brighten Winter Evenings with Filmosound Library Movies

For showing in your home, club, or church, B&H Filmosound Library offers thousands of films you can rent or buy. Sound or silent, they include late Hollywood hits, newsreels, travel, sports, cartoons, and hundreds of interesting educational subjects. Make your living room a "theater" for long winter evenings! Send the coupon for complete information on Filmosound Library.

OPTI-ONICS—products combining the sciences of OPTIcs • electrONics • mechanICS

PRECISION-MADE BY

Bell & Howell

SINCE 1907 THE LARGEST MANUFACTURER OF PROFESSIONAL MOTION PICTURE EQUIPMENT FOR HOLLYWOOD AND THE WORLD

BELL & HOWELL COMPANY
7148 McCormick Road, Chicago 45
Please send ( ) full information on Diplomat Projector; catalog of Filmosound Library ( ) recreational, ( ) educational films

Name..

Address...

City.............................State.........

AC 2-46